SURGICAL AND MEDICAL SUPPLIES PTY LTD
16 Kensington Road Rose Park SA 5067
Telephone: (08) 8332 1666 Fax: (08) 8332 5132
Email: service@surmed.com.au
Website: www.surmed.com.au

Bacterial/Viral Filters | HEPA

Products Independently tested, data available upon request

ECO MAXIPLEAT • HEPA

GVS High-Efficiency particulate arresting filter

GVS HEPA are bacterial and viral filters providing a highly effective barrier to airborne bacterial and viral organisms. GVS HEPA filters present minimal resistance to gas flow and great heat and moisture exchange properties.

Code	ECO MAXI PLEATED 4244/700	ECO MAXI PLEATED 4244/701
Version	ANGLED ADULT	STRAIGHT ADULT
Filtration Method	Mechanical HEPA	Mechanical HEPA
Housing Material	Polypropylene	Polypropylene
Filtration Efficiency BFE	99.999989%	99.999989%
Filtration Efficiency VFE	99.99985%	99.99985%
Resistance @ 30L/min	143 Pa	156 Pa
Resistance @ 60L/min	310 Pa	326 Pa
Resistance @ 90L/min	310 Pa	508 Pa
Tidal Volume Range	200-1500 ml	200-1500 ml
Effective Filtration Area	27.34 cm^2	27.34 cm^2
Filter Efficiency	99.971%	99.971%
Dead Space	66 ml	52 ml
Connections	22M/15F - 22F/15M	22M/15F - 22F/15M
Sampling Port	Yes	Yes
Pyrogenicity	<0.25 Eu/ml	<0.25 Eu/ml
Weight	42 g	40 g
Dimensions	h. 92.0 mm; w. 68.5 mm	h. 81.5 mm; w. 68.5 mm
Operating Temperature	5°C - 40°C	5°C - 40°C
Storage Temperature	0°C - 55°C	0°C - 55°C
Recommended Use	24 h	24 h

ECO MAXI PLEATED 4244/700

Code	Description	Colour	Box Qty
4244/700ABSA	Adult Mechanical Filter Bulk Packed	Green	350
4244/700BAUA	Adult Mechanical Filter Clinic Clean pouch packed	Green	200
4244/700BRSA	Adult Mechanical HEPA Filter Clinic Clean blister packed	Green	50
4244/700BSSA	Adult Mechanical Filter Sterile blister packed	Green	50

ECO MAXI PLEATED 4244/701

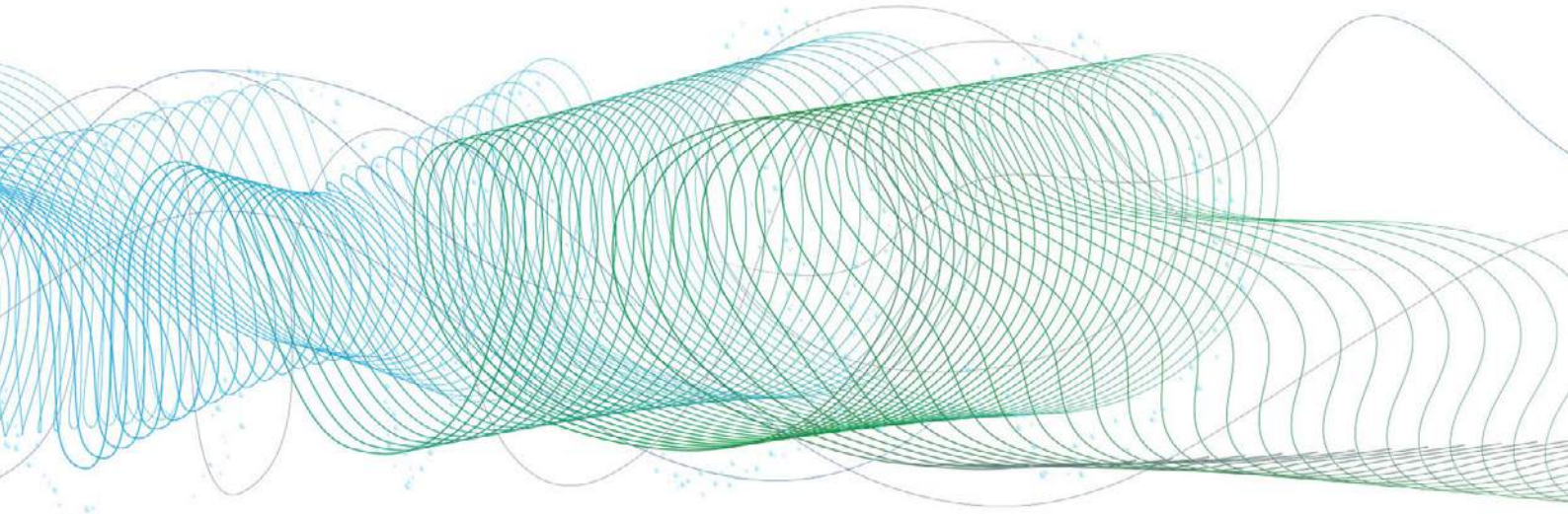
Code	Description	Colour	Box Qty
4244/701ABSA	Adult Mechanical HEPA Filter bulk packed	Green	350
4244/01BAUA	Adult Mechanical HEPA Filter Clinic Clean pouch packed	Transparent	200
4244/701BRSA	Adult Mechanical HEPA Filter Clinic Clean blister packed	Green	50
4244/701BSSA	Adult Mechanical HEPA Filter Sterile blister packed	Green	50
4244/01BTUA	Adult Mechanical HEPA Filter Sterile pouch packed	Green	50

- Product is available without luer lock gas sampling port as code 4244/702

FILTER TECHNOLOGY

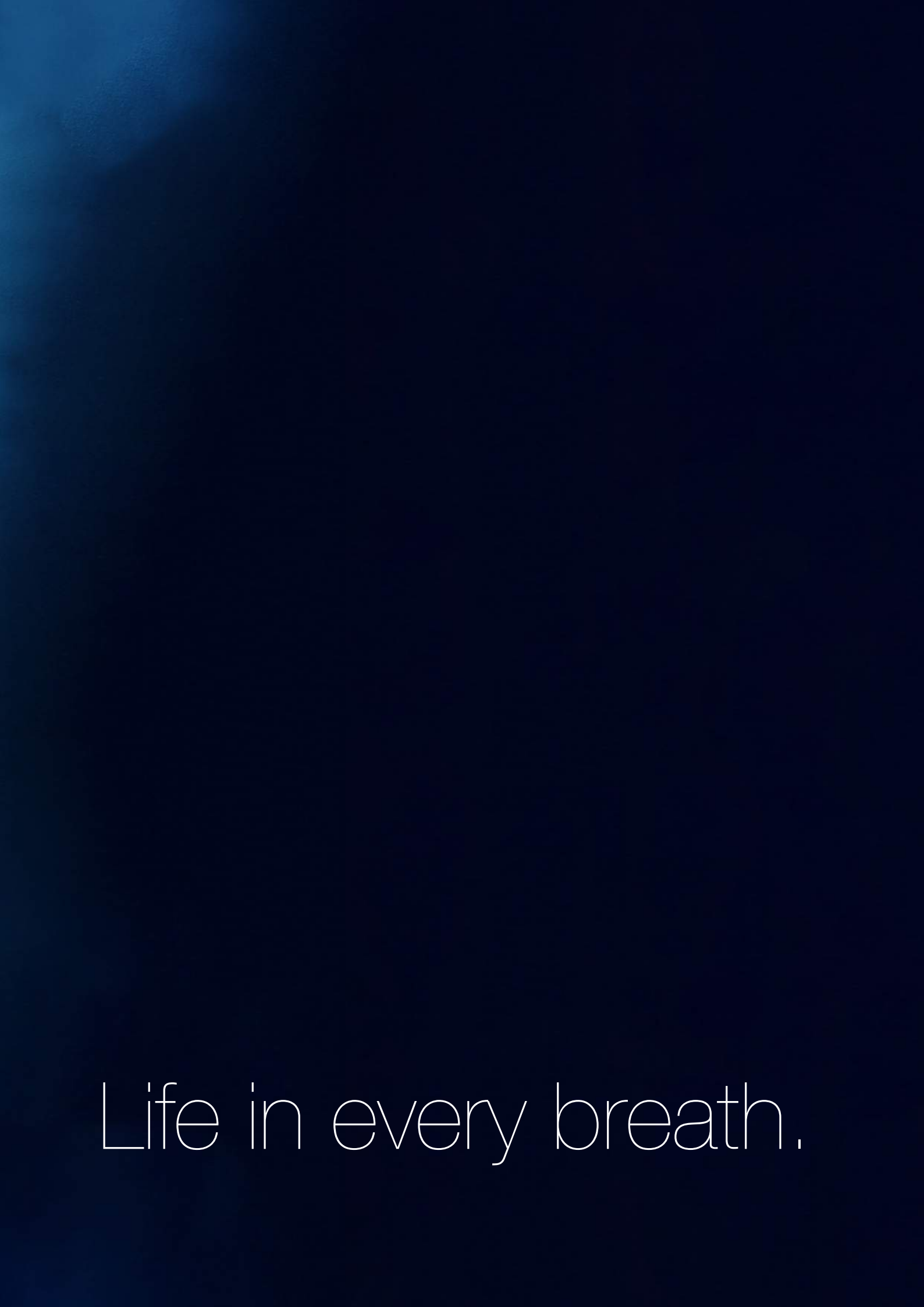
Product Collection

Healthcare Air Filtration



GVS

FILTER TECHNOLOGY


Life in every breath.

This catalog is designed to provide complete information about the full range of GVS Healthcare Air components and filters.
For the sake of simplicity and clarity, the catalog is divided into product categories, consisting of a set of entries illustrating the general characteristics, the field of application and the code of each item. The products are accompanied by a brief description featuring the main technical specifications, the shape and dimensions, the quantity of packaging and a statement of correspondence to the required standards. The wide range of filters and components made by GVS cover all the requirements of the medical device market.

Caution

The data in this catalog may vary according to the different types of materials used in the molding. This means that the product design may sometimes require analysis before orders are accepted.

GVS Group

With over 30 years experience, GVS Group is one of the world's leading manufacturers of filters for applications in the Healthcare, Life Sciences, Automotive, Appliance, Safety, and Commercial & Industrial Filtration sectors.

Healthcare Filters & Components

The origins of GVS initially focused on medical filters for blood and IV solutions. Today GVS provides a wide range of innovative products, including standard and custom devices for laboratory filtration, anesthesia, intensive therapy, and respiratory medicine.

International expansion

GVS group's presence in major markets across the world has led to the opening of 11 production and sales facilities located in Italy (3), UK (2), Brazil (1), USA (2), China (2) and Romania (1) as well as offices in Germany, Spain, México, Argentina, Japan, Korea, India and Russia.

Sophisticated industrial Technology

GVS's highly innovative medical device production technologies include multi-cavity insert and over-molding, high-speed automatic assembly, ultrasonic, heat and radio-frequency welding ,laser cutting and welding and All in-Mold technology, a revolutionary manufacturing technology combining injection molding and robotic assembly all within the molding tool.

Commitment to Quality

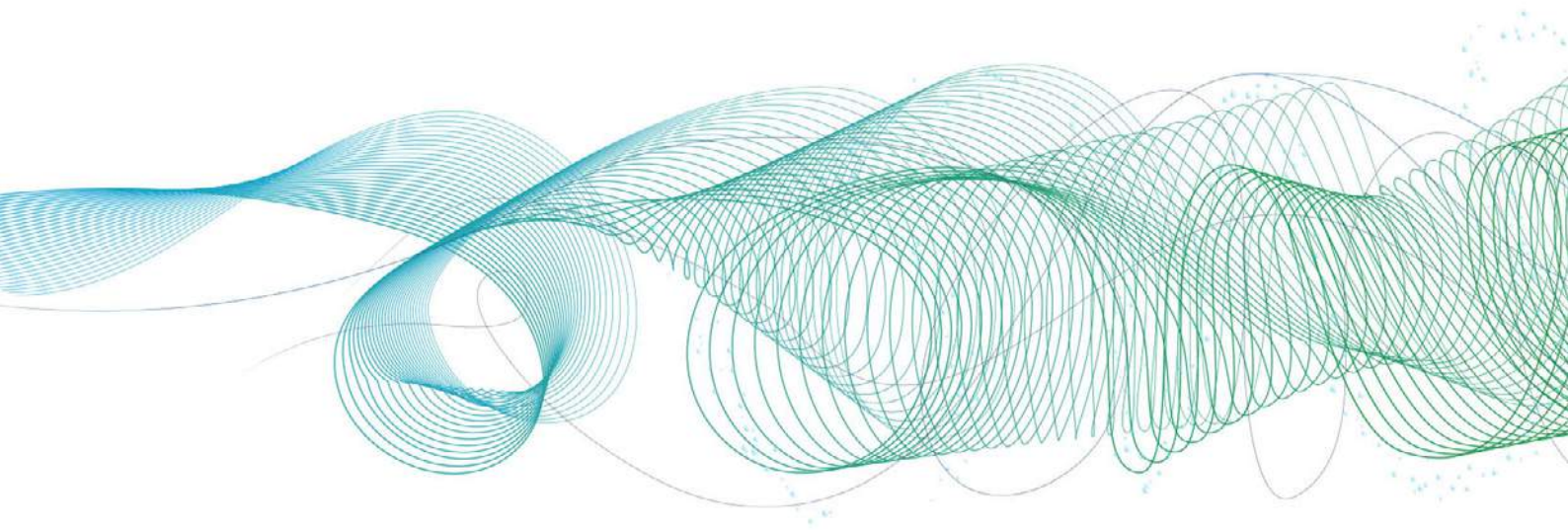
GVS Group have operated to the international standard ISO 9001 since 1995. 2 years later GVS attained the QS9000.
The Medical Division has obtained ISO 13485 certification as well as authorisation for CE marking in accordance with the European Directive 93/42/EEC for some of its medical devices.
The majority of GVS plants have successfully achieved UNI EN ISO 14001 certification for Environmental Management System (EMS).
All other divisions continue to operate to ISO 9001 and other required certifications for their specific markets.

Research & Development

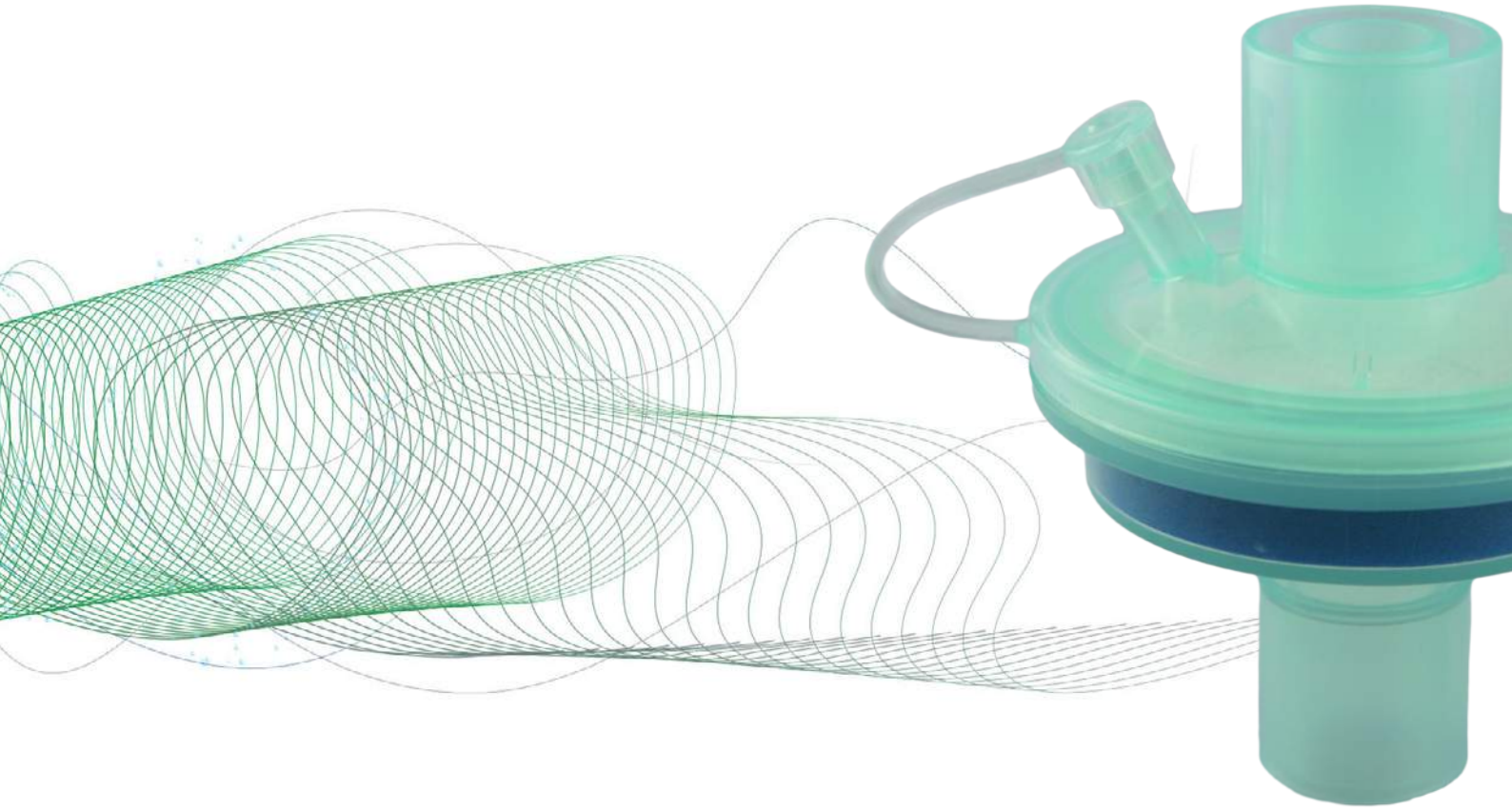
A great part of the know-how incorporated within GVS's products comes from its Research Lab, which ensures that the company's various divisions get all the R&D they need. With its pioneering tools and facilities and highly sophisticated analytic techniques, this lab also works in close conjunction with a large number of hospitals and academic bodies of international acclaim, in Italy, in the UK and wherever GVS operates. Without it, the group's strongly innovation oriented policy and commitment to growth would not be as effective.

Every day approximately 90 million surgeries are performed worldwide.
In 30 million cases, equipment is employed that uses breathing filters.

Contents



Respiratory
Filters & Accessories

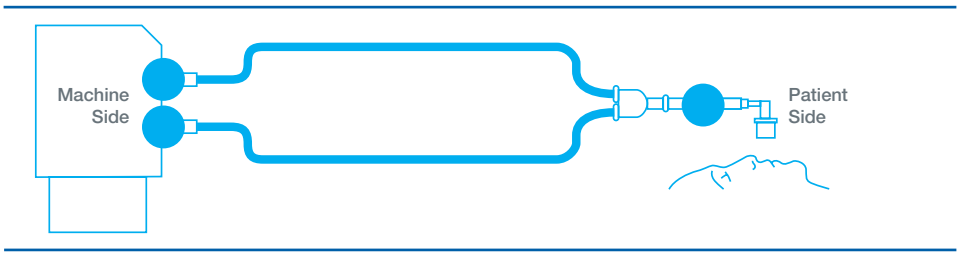


GVS - Healthcare Air Filtration

Where is a breathing filter used?

Even in a hospitalised environment, it is impossible to guarantee sterilisation of equipment for each surgical patient since every day several scheduled surgeries as well as emergency procedures are completed in a single operating room.
Sterilisation of the apparatus requires special equipment and can take a long time meaning expensive equipment has too much downtime.
Using a single use, disposable bacterial/viral filter during the implementation of anaesthesia will severely reduce cross infection between the patient and machine. As the filters are single use per patient the equipment does not need to be sterilised each time enabling machines for surgery to be used more quickly and efficiently.

Filter Location in the System



The filter can be positioned at the patient Y piece, in the Expiratory or Inspiritory limb of the breathing circuit to reduce the risk of a patient becoming infected via the apparatus or an infected patient contaminating the machine.

Why a filter is used

The primary purpose of breathing filters placed between the patient and the respiratory circuit is prevention of cross infection between the patient and apparatus when performing endotracheal anaesthesia or mechanical lung ventilation.
These procedures require that the upper airway be bypassed during respiration. The purpose of the upper airway is to remove particulates from the air to deactivate bacteria and viruses by means of biologically active substances having bactericidal and viricidal properties. These are secreted by the mucous membrane, and also to warm inspired air to 35°C-36°C and to humidify it to a relative humidity of 98%-100%. The recommendation that air filters should be used in medical devices is relatively recent.

Problems that patients encounter

Not only purification of the breathing mixture occurs in the upper airways but also its humidification and warming.
In mechanical lung ventilation, the breathing mixture enters the trachea, bypassing the upper airways.
The lack of humidification and warming of the breathing mixture results in the following complications:

- Hypothermia causes the body to drop below a normal temperature.
- Dehydration, which can cause hypotension.
- Inhalation of contamination and cross infection.
- The mucous membrane swells which disrupts the movement of the mucous in the direction of the pharyngonasal cavity.
- Necrosis of the epithelium and mucous membrane which deprives the lungs of their protective function, leading to lung collapse, infection, pneumonia and other illnesses.

How Filters Limit the Risks

Transmission of infection during endotracheal anaesthesia and prolonged lung ventilation can be prevented by placing a disposable filtering device between the patient and the respiratory circuit. The breathing filter, can also be given the properties of a heat and moisture exchanger to reduce the risk of dehydration and excessive drop in body temperature. As well as providing a barrier to particulate matter entering the patient airways, using breathing filters significantly increases the material resources of the anaesthesia and respiratory equipment.

Type of Filtration Devices

The type of breathing filter and also where it is placed depends on the type of illness, and the physiological characteristics of the patient.
Bacterial / Viral Filter – Removes particles only.
HME – Heat Moisture Exchanger – This filter type contains a foam which retains and returns heat and moisture to the patient. However this filter type does not remove particles.
HMEF – Heat Moisture Exchanger + Filter – Like the HME, the HMEF retains and returns heat and moisture but also contains either a pleated or electrostatic filter media that will remove particles.

How Filters Works

Pleat filters and electrostatic filters both work in different ways.

Electrostatic filters consist of fine synthetic fibres.
The positive and negative charge on filter fibres is generated during the manufacturing process and enhances the filter's ability to attract particulate matter.

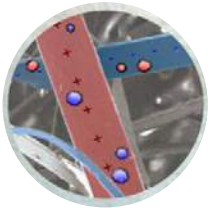
Pleat filters work purely on mechanical filtration and direct interception. Particles which are larger than the pore size of the filter media are unable to pass through and as the filter collects particles the matrix becomes tighter therefore increasing the efficiency.

FILTRATION MEDIA COMPARISON

The hospital environment is increasingly a potential source of infection and with the increased incidence of infectious diseases the possibility of cross contamination due to the reuse of equipment or the sharing of equipment is a real risk. GVS MAF is able to offer different types of filtration solutions for the protection of patients and equipment in the Medical field. ASL offers both pleated paper filters and electrostatic filters. All are independently tested at Nelson Laboratories USA and CAMR Porton Down UK. All pleated filters are individually tested in accordance with BS EN ISO 23328 to confirm that they are all above 99.97% efficiency and classified as HEPA performance. HME media acts in a similar way to a person's upper airway, when they breathe out the media traps and retains moisture and warmth present in the expired breath, which otherwise would be lost. On the next breath the moisture and heat is released, having the effect of both warming and humidifying the inspiratory gas. GVS's line HME media has been developed to maximize the surface area, which is a key feature of the efficiency of performance. The combination of these design features has enabled GVS MAF to achieve over 30mg/L H2O on all there devices when independently tested to ISO 9360 part 1 at MDA test centre University Hospital Wales, Cardiff, UK.

Electrostatic Media

Efficiency: achieved through electrical charge in the media (created through friction during manufacture).
Consistency: the electrical charge will dissipate when exposed to moisture, leaving a more open matrix.
Inconsistency arises when the charge has dissipated but insufficient particulates have been collected between the fibres to aid mechanical filtration.
Protection: electrostatic media cannot repel blood or fluids. If the filter becomes wet its function deteriorates, and if occluded by fluid the fluid can penetrate and enter the device.



GVS electrostatic filters utilise a unique patented 'triboelectrical charge exchange' between a specially developed blend of polymers to induce a highly stable electrical charge on every individual fibre in the media to more easily trap small particles. The advantages of this type of filter are: efficiencies up to 99.9999%, low manufacturing costs and ease of construction.

Fig: Electrostatic Filter – 50% of fibres
+charged: 50% of fibres –charged.

Pleated Hydrophobic Media

Efficiency: achieved by using high-grade paper which is then pleated to increase the filtration area.
Consistency: maintained throughout filter use as the fibre matrix is much closer with performance related to the volume of media to achieve efficiency, rather than an electrical charge to boost it. There is no risk of inconsistency arising as with electrostatic filters.
Protection: a special treatment of the media enables it to repel blood and fluids thereby preventing it from passing into the system and risking contamination, or the filter losing efficiency at being able to filter the air.

GVS mechanical pleated filters carry hydrophobic properties which provide a complete barrier to viral pathogens under normal clinical conditions. Efficiencies up to 99.99999% are available among GVS range of mechanical pleated filters. The advantage of an ability to cope with most particle sizes, high efficiency over long periods, increased efficiency over time, and the highest possible performance (99.99999% on 24 Hour Test) need to be balanced against the higher cost of production.

PERFORMANCE

GVS engineering skill in design and development is evidenced by the fact that it produces an HMEF that has achieved one of the highest ever recorded moisture outputs.
The patents held by GVS further testify to its innovative capabilities. Experience in the use of a wide range of filtration medias ensures cost-effective production without compromising on efficiency or performance even for its filters that achieve 99.99999% efficiency.
Depending on the type of filter or its intended application independent testing is carried out by Nelson Laboratories in the USA; CAMR, Porton Down, the University of Wales, and Dept of Health (MHRA report, March 2004) in the UK.

FILTER TECHNICAL CHARACTERISTICS

There are certain characteristics that a filter should have in order to assure that it is going to be safe and secure in use within a patients breathing system. Its primary function is as an effective barrier to prevent any cross contamination in the clinical environment. It needs to be effective against Bacteria, Virus and any fluids that may be present in the patient's airway.
Medical filters performance can be validated in two ways.

Bacterial and Viral Testing

This is normally performed at an independent test facility which develops specific protocols to simulate the types of challenges that a filter may see in the clinical setting. A challenge particle is chosen to simulate the size of the commonly occurring bacteria and viruses. Generally these tests are not conducted using a "live" virus due to the cost and safety issues. GVS MAF has appointed Nelson Laboratories, Utah, USA as independent test facility. Their bacterial test protocol uses Staphylococcus Aureus as a challenge organism which has an approximate size 0.6 mm and the viral test uses an X174 Bacteriophage which has a size of 0.027 mm. It is worth noting that the HIV virus is 0.08 mm and Hepatitis C is 0.02 mm so the test protocol does offer a clinically relevant reflection of their performance.

Penetration Test

A standard BS EN ISO 23328 (Breathing System Filters for Anesthetic and Respiratory use. Part 1 Salt Test method to assess filtration performance) has been developed as a method of benchmarking the performance of one filter against another. The test requires the filter to be challenged by a 0.3 mm Sodium Chloride particle at a flow rate of 30 Liters per minute. The level of penetration is measured and the resulting efficiency reported as a percentage. i.e.if a filter has penetration rate of 0.5% the filters performance will be recorded as 99.5% efficient. This test allows a direct comparison of how individual filters perform. Under this system a filter must be more than 99.97% efficient to classified as a HEPA filter. Most of the GVS MAF pleated filters are individually tested during manufacture to confirm that they are all HEPA performance.

The quality of connections of the filter housing is vital to ensure a safe secure fitting within the patients breathing system during clinical use. All of the 15mm & 22mm tapered connections are tested and comply with ISO 5356 for maximum patient safety. It is now common clinical practice to continually measure the gas that the patient is breathing in and expiring during the any procedure. The GVS MAF filters have been designed to comply with ISO standards to ensure a safe secure fit to monitoring devices. In addition the “Cap & Strap” is an integral part of the molding minimizing the possibility of it becoming detached and inadvertently occluding the airway, improving patient safety. The products are all designed to meet the clinical requirements from the smallest baby to the largest adult, with a focus upon minimal resistance, minimum weight and product dead space, combined with the maximum possible product efficiency. Clinicians may choose a combined product which offers both filtration and humidification (HMEF) to the respiratory gases. This helps alleviate any symptoms associated with breathing cold dry medical gases for a prolonged period of time. The performance of all HME products is verified by independent testing of the product against ISO 9360.

Tidal Volume: (VT) The volume of gas inhaled and exhaled by the patient during one respiratory cycle. The average for a 70 Kg adult is 500 ml.

Minute Volume: (MV) The quantity of gas exhaled from the lungs per minute; i.e. the tidal volume multiplied by respiratory rate. An average 70Kg Adult with a respiratory rate of 12 breaths per minute (500 ml x 12) would have a minute volume of 6 liters.

Dead Space: There are two types.

1) Anatomical Dead Space is the volume of the patient airways of the nose, mouth, and trachea down to the level of the alveoli, representing the portion of inspired gas unavailable for exchange of gases with pulmonary capillary blood. The average anatomical dead space of a 70 Kg adult is 150 ml.

2) Breathing System Dead Space is the volume of any breathing system components which is adding to the portion of the inspired gas that is unavailable for exchange of gases with pulmonary capillary blood.

Number of Organisms Challenging the Filter	% Efficiency of the Filter	Number of Organisms Passing through the Filter
1,000,000	90	100,000
	99	10,000
	99.9	1000
	99.99	100
	99.999	10
	99.9999	1

Resistance: This is an expression of the amount of effort that is required to make an inspiratory or an expiratory breath.

Efficiency: This will be the level of filtration protection or function that the device can deliver. The efficiency of the filter is normally expressed as a reflection as the number of micro organisms that pass through the filter media when it is challenged. This filter is then described as being X% efficient. The X% is an expression of the number of organisms penetrating the filter when challenged by an aerosol containing 1,000,000 micro organisms.

The table below explains the relevance of the X% on performance and level of protection in the clinical environment.

HME: Heat Moisture Exchanger. These devices allow heat and moisture to be captured from expired gases and then returned to the patient in the inspired gases. This is established by testing against ISO 9360 -1 &2 2000 “Anesthetic & Respiratory Equipment, HME’s for humidifying respired gases in humans”.

Capnography: This is the measurement and graphic display of CO_2 levels in the airways, which can be performed by infrared spectroscopy. A small sample of inspired and expired gases is taken via the gas sampling port on the filter. Capnography assists in the management of the patient by providing continuous and non invasive monitoring of ventilation in critically ill and anaesthetized patients. It allows early detection of clinically significant changes in respiratory status by displaying changes in the amount of CO_2 and abnormal CO_2 waveforms.

ISO: International Standards Organization is a group which has developed test and performance standards to introduce normalized standards of global practice and help improve patient safety.

Since 2000 GVS Group have developed a proprietary range of HME (Heat and Moisture Exchanger) and HMEFs (Heat and Moisture Exchanger and bacterial / viral Filter) and Filters (Bacterial and Viral) for use in anesthesia, intensive therapy, respiratory medicine, and ventilation, with efficiencies up to 99.99999%. Technical product specifications provides detailed information on performance: e.g. efficiency, resistance to flow, moisture output (if applicable), dead-space, weight, connector size and overall dimensions. Please note that products are available bulk packed, individually packed clinically clean, and or individually sterile upon request. These products are designed and manufactured using quality systems in accordance with BS EN ISO 9001, BS EN ISO 13485 and to the Medical Devices Directive 93/42 EEC. This means that GVS has the CE Marking on all class IIa filters. Sterile filters are ETO sterilized to ISO11135-1 and Sterility Assurance Level (SAL) monitoring is based on ISO 11737-1 re-Microbiological Methods.

Filters

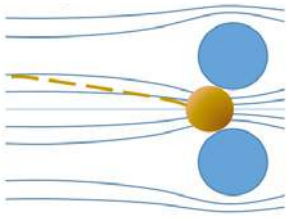
GVS Healthcare Air Filtration offers a range of filters for use within Anesthesia, Respiratory, Critical Care and Surgical clinical areas. These filters are used with patients whose upper airways are being bypassed by an artificial tracheal airway removing the patients natural ability to filter inspired air or receiving artificial ventilatory support where a gas is being introduced into a body cavity as during Laparoscopic surgery or to protect equipment, staff and the environment from potential cross contamination. The hospital environment is increasingly a potential source of infection and with the increase incidence of infectious diseases the possibility of cross contamination due to the reuse of equipment or the sharing of equipment is a real risk.

GVS Healthcare Air Filtration is able to offer different types of filtration solutions for the protection of patients and equipment in the Medical field. We offer both pleated paper filters and electrostatic filters. All are independently tested at Nelson Laboratories USA and CAMR Porton Down UK. All pleated filters are individually tested against BS EN ISO 23328 to confirm that they are all above 99.97% efficiency and classified as HEPA performance.

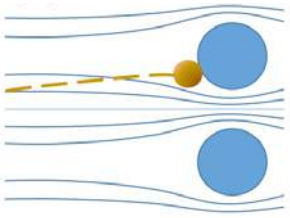
Feature	Benefit
Low dead space	Minimizes possibility and dangers associated with re-breathing Carbon Dioxide
Lightweight	Reduces any pull on patients tracheal connection
Transparent	Allows easy visualization of any potential blockage
ISO Tapered Connections	Guarantees safe, secure connection to the breathing system.
ISO Gas sampling port	Easy, safe monitoring of expired gases
Complete Product Range	Meets all clinical requirements from Neonatal to Adults. Offers protection for all types of medical equipment from airborne and liquid cross contamination.
Proven performance	Offers high efficiency protection against bacterial and viral contamination. Independently tested and validated. Efficiencies up to 99.99999%

THE THEORY OF FILTRATION

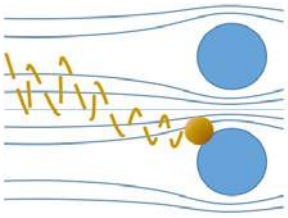
Particulate matter is captured within a filter by 4 main methods:



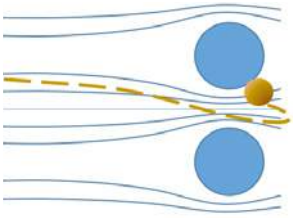
Straining - The physical capture of a particle by the fibres or holes in a media preventing it passing due to their relative size.



Impingement - The particle physically hits and sticks to the fibre.

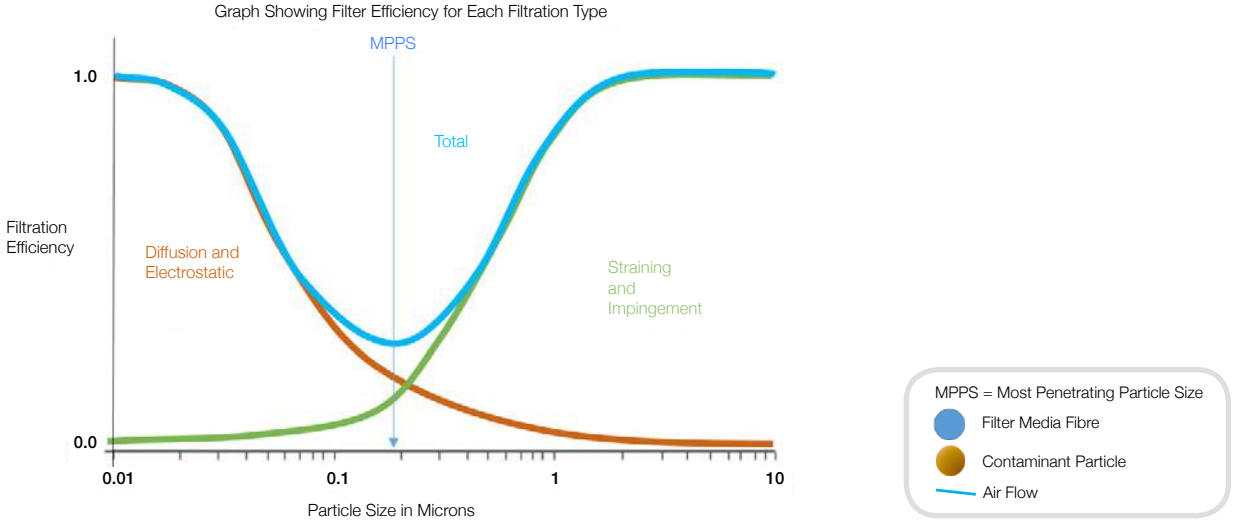


Diffusion - Brownian motion causes the particle to move in irregular patterns increasing it chance of making contact with and adhering to the filter fibres.



Electrostatic - The particulate is attracted to the media though an electrostatic charge. This is generally only in synthetic media and very often this electrostatic charge diminishes with time and/or humidity.

MPPS - The most penetrating particle size varies between different media, contaminants and according to air flow. Generally as air flow increases, efficiency decreases.



ECO SLIMLINE

The GVS Bacterial / Viral Filters provide effective protection from microbial cross contamination.
This range has been designed for use in breathing and anesthetic systems for the protection of the patient, hospital personnel and the equipment from potential microbial contamination. The GVS Bacterial / Viral Filters are designed with standard ISO fittings to ensure a perfect connection to different ventilators and anesthesia systems. The high efficiency and the very low/stable breathing resistance are the strength of GVS Bacterial / Viral Filters line.
The range of filters includes a large number of options. Filters are available with or without CO_2 sampling, straight or angled.

Range of product in compliance with the ISO 10993-1 Biological evaluation of medical devices

Code	ECO MAXI 4222/700	ECO MAXI 4222/701	ECO MAXI 4222/702	ECO MAXI 4222/703	ECO MAXI 4222/705	FLOWBAC FR004
Version	ANGLED ADULT	STRAIGHT ADULT	STRAIGHT ADULT	STRAIGHT ADULT	STRAIGHT ADULT	STRAIGHT ADULT
Filtration Method	Electrostatic	Electrostatic	Electrostatic	Electrostatic	Electrostatic	Electrostatic
Housing Material	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene	K-Resin
Filtration Efficiency BFE	99.9995%	99.9995%	99.9995%	99.9995%	99.99995%	99.999%
Filtration Efficiency VFE	99.9985%	99.9985%	99.9985%	99.9985%	99.99985%	99.999%
Resistance @ 30L/min	82 Pa	99 Pa	76 Pa	74.5 Pa	45 Pa	75 Pa
Resistance @ 60L/min	184.5 Pa	231.6 Pa	160 Pa	160 Pa	96 Pa	160 Pa
Resistance @ 90L/min	325 Pa	419.8 Pa	270 Pa	255 Pa	162.5 Pa	290 Pa
Tidal Volume Range	90-1500 ml	90-1500 ml	90-1500 ml	90-1500 ml	90-1500 ml	250-1500 ml
Effective Filtration Area	27.34 cm^2	27.34 cm^2	27.34 cm^2	27.34 cm^2	27.80 cm^2	37 cm^2
Filter Efficiency	98.96%	98.96%	98.98%	98.96%	97.65%	97,65%
Dead Space	30 ml	21 ml	30 ml	30 ml	21 ml	30 ml
Connections	22M/15F - 22F/15M	22M/15F - 22F/15M	22M/15F - 22F/15M	22M/15F - 22F	22M/15F - 22F	22F - 22M/15F
Sampling Port	Yes	Yes	No	No	No	Yes
Pyrogenicity	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml
Weight	25 g	25 g	23 g	21 g	25 g	23 g
Dimensions	h. 67.2 mm; w. 68.5 mm	h. 67.2 mm; w. 68.5 mm	h. 67.2 mm; w. 68.5 mm	h. 67.2 mm; w. 68.5 mm	h. 62 mm; w. 68.5 mm	h. 67.2 mm; w. 68.5 mm
Operating Temperature	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C
Storage Temperature	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C
Recommended Use	24 h	24 h	24 h	24 h	24 h	24 h

ECO MAXI 4222/700

Code	Description	Colour	Box Qty
4222/700ABSA	Adult Electrostatic Filter Bulk Packed	Green	350
4222/700BAUA	Adult Electrostatic Filter Clinic Clean pouch packed	Green	200
4222/700BRSA	Adult Electrostatic Filter Clinic Clean blister packed	Green	50
4222/700BSSA	Adult Electrostatic Filter Sterile blister packed	Green	50

ECO MAXI 4222/701 & 4222/01

Code	Description	Colour	Box Qty
4222/701ABSA	Adult Electrostatic Filter Bulk Packed	Green	350
4222/01ABSA	Adult Electrostatic Filter Bulk Packed	Transparent	350
4222/701BAUA	Adult Electrostatic Filter Clinic Clean pouch packed	Green	200
4222/01BAUA	Adult Electrostatic Filter Clinic Clean pouch packed	Transparent	200
4222/701BRSA	Adult Electrostatic Filter Clinic Clean blister packed	Green	50
4222/01BRSA	Adult Electrostatic Filter Clinic Clean blister packed	Transparent	50
4222/701BSSA	Adult Electrostatic Filter Sterile blister packed	Green	50
4222/01BSSA	Adult Electrostatic Filter Sterile blister packed	Transparent	50
4222/01DDKBAUA	Adult Electrostatic Filter with Expandable Catheter Mount and Straight Adaptor pouch packed	Transparent	50
4222/01DFKBAUA	Adult Electrostatic Filter with Expandable Tube Catheter Mount Clinic Clean pouch packed	Transparent	50

Filter Kits

ECO MAXI 4222/702 & 4222/02

Code	Description	Colour	Box Qty
4222/702ABSA	Adult Electrostatic Filter Bulk Packed	Green	350
4222/02ABSA	Adult Electrostatic Filter Bulk Packed	Transparent	350
4222/702BAUA	Adult Electrostatic Filter Clinic Clean pouch packed	Green	200
4222/02BAUA	Adult Electrostatic Filter Clinic Clean pouch packed	Transparent	200
4222/702BRSA	Adult Electrostatic Filter Clinic Clean blister packed	Green	50
4222/02BRSA	Adult Electrostatic Filter Clinic Clean blister packed	Transparent	50
4222/702BSSA	Adult Electrostatic Filter Sterile blister packed	Green	50
4222/02BSSA	Adult Electrostatic Filter Sterile blister packed	Transparent	50
4222/02DDKBAUA	Adult Electrostatic Filter with Expandable Catheter Mount and Straight Adaptor pouch packed.	Transparent	50
4222/02DFKBAUA	Adult Electrostatic Filter with Expandable Tube Catheter Mount Clinic Clean pouch packed	Transparent	50

Filter Kits

ECO MAXI 4222/703 & 4222/03

Code	Description	Colour	Box Qty
4222/703ABSA	Adult Electrostatic Filter Bulk Packed	Green	350
4222/03ABSA	Adult Electrostatic Filter Bulk Packed	Transparent	350
4222/703BAUA	Adult Electrostatic Filter Clinic Clean pouch packed	Green	200
4222/03BAUA	Adult Electrostatic Filter Clinic Clean pouch packed	Transparent	200
4222/703BRSA	Adult Electrostatic Filter Clinic Clean blister packed	Green	50
4222/03BRSA	Adult Electrostatic Filter Clinic Clean blister packed	Transparent	50
4222/703BSSA	Adult Electrostatic Filter Sterile blister packed	Green	50
4222/03BSSA	Adult Electrostatic Filter Sterile blister packed	Transparent	50

ECO MAXI 4222/705

Code	Description	Colour	Box Qty
4222/705ABSA	Adult Electrostatic Filter Bulk Packed	Green	50

FLOWBACK FR004

Code	Description	Colour	Box Qty
FR004AKRET200A00	Adult Breathing Electrostatic Filter - FLOWBAC bulk	Transparent	350
FR004SKRET200A00	Adult Breathing Electrostatic Filter - FLOWBAC sterile	Transparent	50
FR004AKRET200D00	Adult Breathing Electrostatic Filter – FLOWBAC bulk	Blue	350
FR004SKRET200D00	Adult Breathing Electrostatic Filter - FLOWBAC sterile	Blue	50

ECO MINI • ECO MICRO

Code	ECO MINI 9066/701	ECO MINI 9067/700	ECO MICRO 9080/700	ECO MICRO 9080/01
Version	STRAIGHT PEDIATRIC	ANGLED PEDIATRIC	ANGLED NEONATAL	STRAIGHT NEONATAL
Filtration Method	Electrostatic	Electrostatic	Electrostatic	Electrostatic
Housing Material	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Filtration Efficiency BFE	99.9997%	99.9998%	99.9985%	99.999%
Filtration Efficiency VFE	99.9989%	99.9995%	99.977%	99.99%
Resistance @ 5L/min	N.A.	N.A.	44.8 Pa	44.8 Pa
Resistance @ 10L/min	N.A.	N.A.	93.1 Pa	93.1 Pa
Resistance @ 15L/min	87 Pa	79 Pa	98.5 Pa	98.5 Pa
Resistance @ 30L/min	185 Pa	178.5 Pa	N.A.	N.A.
Resistance @ 60L/min	418 Pa	396 Pa	N.A.	N.A.
Tidal Volume Range	100-1500 ml	90-1500 ml	> 45 ml	> 35 ml
Effective Filtration Area	13.0 cm^2	13.0 cm^2	13.0 cm^2	13.0 cm^2
Filter Efficiency	96.2%	97%	90.7%	90.7%
Dead Space	26 ml	32 ml	13 ml	11 ml
Connections	22M/15F - 22F/15M	22M/15F - 22F/15M	22M/15F - 22F/15M	15M/8,5M - 15F
Sampling Port	Yes	Yes	Yes	Yes
Pyrogenicity	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml
Weight	20 g	19 g	9 g	9 g
Dimensions	h. 73.0 mm; w. 48.0 mm	h. 83.0 mm; w. 56.0 mm	h. 44.0 mm; w. 59.0 mm	h. 46.0 mm; w. 38.0 mm
Operating Temperature	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C
Storage Temperature	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C
Recommended Use	24 h	24 h	24 h	24 h

ECO MINI 9066/701

Code	Description	Colour	Box Qty
9066/701ABSA	Pediatric Electrostatic Filter bulk packed	Green	350
9066/701BAUA	Pediatric Electrostatic Filter Clinic Clean pouch packed	Green	200
9066/701BRSA	Pediatric Electrostatic Filter Clinic Clean blister packed	Green	50
9066/701BSSA	Pediatric Electrostatic Filter Sterile blister packed	Green	50

ECO MINI 9067/700

Code	Description	Colour	Box Qty
9067/700ABSA	Pediatric Electrostatic Filter bulk packed	Green	350
9067/700BRSA	Pediatric Electrostatic Filter Clinic Clean blister packed	Green	50
9067/700BSSA	Pediatric Electrostatic Filter Sterile blister packed	Green	50

ECO MICRO 9080/700

Code	Description	Colour	Box Qty
9080/700ABSA	Neonatal Electrostatic Filter Bulk Packed	Green	800
9080/700BAUA	Neonatal Electrostatic Filter Clinic Clean pouch packed	Green	200
9080/700BRSA	Neonatal Electrostatic Filter Clinic Clean blister packed	Green	50
9080/700BSSA	Neonatal Electrostatic Filter Sterile blister packed	Green	50

ECO MICRO 9080/01

Code	Description	Colour	Box Qty
9080/01BAUA	Neonatal Electrostatic Clear Filter Clinic Clean pouch packed	Transparent	300
9080/01BTUA	Neonatal Electrostatic Clear Filter Sterile pouch packed	Transparent	300
9080/01ABUA	Neonatal Electrostatic Clear Filter bulk packed	Transparent	2000

ECO MAXI

• HMEF - ELECTROSTATIC & HEPA •

GVS MAF offers a range of HMEF for use within Anesthesia, Respiratory and Critical Care clinical areas. Indicated for use with patients whose upper airways are being bypassed by an artificial tracheal airway or receiving artificial ventilator support. This removes the patient's ability to filter and humidify inspired gases. Medical gases are much colder and dryer than those, which we would normally breathe so the problem is exacerbated during Anesthesia and Ventilation.

Code	ECO MAXI 4333/711	ECO MAXI 4333/761	ECO MAXI 4244/711	ECO MAXI 4244/761	ECO MIDI 9064/711	ECO MIDI 9065/710
Version	STRAIGHT ADULT	STRAIGHT ADULT	STRAIGHT ADULT	STRAIGHT ADULT	STRAIGHT ADULT	ANGLED ADULT
Filtration Method	Electrostatic HMEF	Electrostatic HMEF	Mechanical HEPA HMEF	Mechanical HEPA HMEF	Electrostatic HMEF	Electrostatic HMEF
Housing Material	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Filtration Media	Polyurethane foam	Corrugated paper	Polyurethane foam	Corrugate paper	Polyurethane foam	Polyurethane foam
Filtration Efficiency BFE	99.9998%	99.999%	99.999%	99.999%	99.9996%	99.999%
Filtration Efficiency VFE	99.9998%	99.999%	99.999%	99.999%	99.9992%	99.999%
Resistance @ 30L/min	96 Pa	74.5 Pa	129 Pa	129 Pa	118 Pa	124 Pa
Resistance @ 60L/min	224 Pa	160 Pa	305 Pa	305 Pa	270 Pa	269 Pa
Resistance @ 90L/min	398 Pa	225 Pa	542 Pa	542 Pa	666 Pa	650 Pa
Moisture output @VT 500 ml	34 mg/L	31.5 mg/L	30 mg/L	30 mg/L	11.7 mg/L	> 31 mg/L
Tidal Volume Range	150-1500 ml	200-1500 ml	200-1500 ml	200-1500 ml	120-1500 ml	120-1500 ml
Effective Filtration Area	27.3 cm^2	27.3 cm^2	290,40 cm^2	290,40 cm^2	13.0 cm^2	13.0 cm^2
Filter Efficiency	98.98%	91.68%	99.9986%	99.9986%	81%	73%
Dead Space	55 ml	46.5 ml	46 ml	46 ml	35 ml	41 ml
Connections	22M/15F-22F/15M	22M/15F-22F/15M	22M/15F-22F/15M	22M/15F-22F/15M	22M/15F-22F/15M	22M/15F-22F/15M
Sampling Port	Yes	Yes	Yes	Yes	Yes	Yes
Pyrogenicity	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml
Weight	27 g	40 g	40 g	40 g	19.6 g	21 g
Dimensions	h. 77.0 mm; w. 68.5 mm	h. 81.5 mm; w. 68.5 mm	h. 84.9 mm; w. 68.5 mm	h. 84.9 mm; w. 68.5 mm	h. 81.4 mm; w. 48.1 mm	h. 91.3 mm; w. 56.2 mm
Operating Temperature	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C
Storage Temperature	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C
Recommended Use	24 h	24 h	24 h	24 h	24 h	24 h

ECO MAXI 4333/711

Code	Description	Colour	Box Qty
4333/711ABSA	Adult Heat Moisture Exchanger Electrostatic Filter (HMEF) bulk packed	Green	350
4333/01BAUA	Adult Heat Moisture Exchanger Electrostatic Filter (HMEF) Clear Clinic Clean pouch packed	Transparent	200
4333/711BRSA	Adult Heat Moisture Exchanger Electrostatic Filter (HMEF) Clinic Clean blister packed	Green	50
4333/711BSSA	Adult Heat Moisture Exchanger Electrostatic Filter (HMEF) Sterile blister packed	Green	50

- Product is available in straight version without luer lock gas sampling port as code 4333/712
- Product is available in angled version as code 4333/710
- Product is available with expandable catheter mount and straight adaptor as code 4333/01DDK

ECO MAXI 4333/761

Code	Description	Colour	Box Qty
4333/761ABSA	Adult Heat Moisture Exchanger Electrostatic Filter (HMEF) bulk packed	Green	350
4333/761BAUA	Adult Heat Moisture Exchanger Electrostatic Filter (HMEF) Clinic Clean pouch packed	Green	200
4333/761BRSA	Adult Heat Moisture Exchanger Electrostatic Filter (HMEF) Clinic Clean blister packed	Green	50
4333/761BSSA	Adult Heat Moisture Exchanger Electrostatic Filter (HMEF) Sterile blister packed	Green	50

ECO MAXI 4244/711

Code	Description	Colour	Box Qty
4244/711ABSA	Adult Mechanical HEPA Filter (HMEF) bulk packed	Green	350
4244/711BAUA	Adult Mechanical HEPA Filter (HMEF) Clinic Clean pouch packed	Green	200
4244/711BRSA	Adult Mechanical HEPA Filter (HMEF) Clinic Clean blister packed	Green	50
4244/711BSSA	Adult Mechanical HEPA Filter (HMEF) Sterile blister packed	Green	50

ECO MAXI 4244/761

Code	Description	Colour	Box Qty
4244/761ABSA	Adult Mechanical HEPA Filter (HMEF) bulk packed	Green	350
4244/761BAUA	Adult Mechanical HEPA Filter (HMEF) Clinic Clean pouch packed	Green	200
4244/761BRSA	Adult Mechanical HEPA Filter (HMEF) Clinic Clean blister packed	Green	50
4244/761BSSA	Adult Mechanical HEPA Filter (HMEF) Sterile blister packed	Green	50

ECO MIDI 9064/711

Code	Description	Colour	Box Qty
9064/711ABSA	Adult Electrostatic Filter with Heat Moisture Exchanger (HMEF) bulk Packed	Green	350
9064/711BAUA	Adult Electrostatic Filter with Heat Moisture Exchanger (HMEF) Clinic Clean pouch packed	Green	200
9064/711BRSA	Adult Electrostatic Filter with Heat Moisture Exchanger (HMEF) Clinic Clean blister packed	Green	50
9064/711BSSA	Adult Electrostatic Filter with Heat Moisture Exchanger (HMEF) Sterile blister packed	Green	50

ECO MIDI 9065/710

Code	Description	Colour	Box Qty
9065/710ABSA	Adult Electrostatic Filter with Heat Moisture Exchanger (HMEF) bulk packed	Green	350
9065/710BAUA	Adult Electrostatic Filter with Heat Moisture Exchanger (HMEF) Clinic Clean pouch packed	Green	200
9065/710BRSA	Adult Electrostatic Filter with Heat Moisture Exchanger (HMEF) Clinic Clean blister packed	Green	50
9065/710BSSA	Adult Electrostatic Filter with Heat Moisture Exchanger (HMEF) Sterile blister packed	Green	50

ECO MINI

Code	ECO MINI 9066/711	ECO MINI 9067/710	ECO MINI 9064/100	ECO MICRO 9080/710	ECO MICRO 9080/100
Version	STRAIGHT PEDIATRIC	ANGLED PEDIATRIC	STRAIGHT PEDIATRIC	ANGLED NEONATAL	STRAIGHT NEONATAL
Filtration Method	Electrostatic HMEF	Electrostatic HMEF	Electrostatic HMEF	Electrostatic HMEF	Electrostatic HMEF
Housing Material	Polypropylene	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Filtration Media	Polyurethane foam	Polyurethane foam	Polyurethane Foam	Polyurethane Foam	Polyurethane foam
Filtration Efficiency BFE	99.9998%	99.9998%	99.999%	99.9985%	99.9985%
Filtration Efficiency VFE	99.999%	99.9995%	99.999%	99.976%	99.9976%
Resistance @ 5L/min	N.A.	N.A.	N.A.	54 Pa	54 Pa
Resistance @ 10L/min	N.A.	N.A.	N.A.	111 Pa	111 Pa
Resistance @ 15L/min	105 Pa	87 Pa	213 Pa	178 Pa	178 Pa
Resistance @ 30L/min	239 Pa	190 Pa	N.A.	N.A.	N.A.
Resistance @ 60L/min	577 Pa	462 Pa	N.A.	N.A.	N.A.
Moisture output	33.5 mg/H_2O/l @VT 250 ml	36.5 mg/H_2O/l @VT 250 ml	33 mg/H_2O/l @VT 500 ml	25.4 mg/H_2O/l @ VT 250 ml	28.9 mg/H_2O/l @ VT 250 ml
Tidal Volume Range	90-1500 ml	90-1500 ml	90-1500 ml	> 45 ml	> 35 ml
Effective Filtration Area	13.0 cm^2	13.0 cm^2	N.A.	5.94 cm^2	5.94 cm^2
Filter Efficiency	96.2%	97%	90%	85.1%	93.9%
Dead Space	26 ml	29 ml	42 ml	10.25 ml	11 ml
Connections	22M/15F - 22F/15M	22M/15F - 22F/15M	22M/15F - 15M	22M/15F - 15M	15M/8.5M - 15F
Sampling Port	Yes	Yes	Yes	Yes	Yes
Pyrogenicity	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml
Weight	19 g	18 g	19 g	9 g	9 g
Dimensions	h. 73.0 mm; w. 48.0 mm	h. 83.0 mm; w. 48.0 mm	h. 77.7 mm; w. 53 mm	h. 59.0 mm; w. 37.0 mm	h. 48.0 mm; w. 38.0 mm
Operating Temperature	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C
Storage Temperature	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C
Recommended Use	24 h	24 h	24 h	24 h	24 h

ECO MINI 9066/711

Code	Description	Colour	Box Qty
9066/711ABSA	Pediatric Electrostatic Filter with Heat Moisture Exchanger (HMEF) bulk packed	Green	350
9066/711BAUA	Pediatric Electrostatic Filter with Heat Moisture Exchanger (HMEF) Clinic Clean pouch packed	Green	200
9066/711BRSA	Pediatric Electrostatic Filter with Heat Moisture Exchanger (HMEF) Clinic Clean blister packed	Green	50
9066/711BSSA	Pediatric Electrostatic Filter with Heat Moisture Exchanger (HMEF) Sterile blister packed	Green	50

ECO MINI 9067/710

Code	Description	Colour	Box Qty
9067/710ABSA	Pediatric Electrostatic Filter with Heat Moisture Exchanger (HMEF) bulk packed	Green	350
9067/710BAUA	Pediatric Electrostatic Filter with Heat Moisture Exchanger (HMEF) Clinic Clean pouch packed	Green	200
9067/710BRSA	Pediatric Electrostatic Filter with Heat Moisture Exchanger (HMEF) Clinic Clean blister packed	Green	50
9067/710BSSA	Pediatric Electrostatic Filter with Heat Moisture Exchanger (HMEF) Sterile blister packed	Green	50

ECO MICRO 9080/710

Code	Description	Colour	Box Qty
9080/710ABSA	Neonatal Heat Moisture Exchanger Filter (HMEF) bulk packed	Green	350
9080/710BAUA	Neonatal Heat Moisture Exchanger Filter (HMEF) Clinic Clean pouch packed	Green	200
9080/710BRSA	Neonatal Heat Moisture Exchanger Filter (HMEF) Clinic Clean blister packed	Green	50
9080/710BSSA	Neonatal Heat Moisture Exchanger Filter (HMEF) Sterile blister packed	Green	50

ECO MINI 9064/100

Code	Description	Colour	Box Qty
9064/100BAUA	Pediatric Electrostatic Filter with Heat Moisture Exchanger (HMEF) Clear Clinic Clean pouch packed	Transparent	200

ECO MICRO 9080/100

Code	Description	Colour	Box Qty
9080/100BAUA	Neonatal Heat Moisture Exchanger Filter (HMEF) Clear Clinic Clean pouch packed	Transparent	300
9080/100ABUA	Neonatal Heat Moisture Exchanger Filter (HMEF) Clear bulk packed	Transparent	2000
9080/100BTUA	Neonatal Heat Moisture Exchanger Filter (HMEF) Clear Sterile pouch packed	Transparent	300

ECO HME

GVS HME Filter acts in a similar way to a person's upper airway, when they breathe out the media traps and retains moisture and warmth present in the expired breath, which otherwise would be lost. On the next breath the moisture and heat is released, having the effect of both warming and humidifying the inspiratory gas.

The HME GVS MAF media has been developed to maximize the surface area, which is a key feature of the efficiency of performance. The ability to retain moisture from the gas can be further maximized by binding hygroscopic salts, which have a strong attraction to water in the foam media pad. The special binding process ensures that the media does not start attracting moisture until the patient starts to breathe through the device. A range of chemical free HME media are also increasingly in use.

Code	ECO MAXI 4333/750	ECO MAXI 4333/751	ECO MIDI 9064/751	ECO MIDI 9065/750	TERMOFLOW FR003
Version	ANGLED ADULT	STRAIGHT ADULT	STRAIGHT ADULT	ANGLED ADULT	STRAIGHT ADULT
Filtration Method	Electrostatic HME	Electrostatic HME	Electrostatic HME	Electrostatic HME	Electrostatic HME
Housing Material	Polypropylene	Polypropylene	Polypropylene	Polypropylene	K-Resin
Filtration Media	Polyurethane foam	Polyurethane foam	Polyurethane foam	Polyurethane foam	Hygroscopic Cellulose
Resistance @ 30L/min	32 Pa	30 Pa	92 Pa	32 Pa	150 Pa
Resistance @ 60L/min	98 Pa	68 Pa	255 Pa	81 Pa	220 Pa
Resistance @ 90L/min	189 Pa	140 Pa	501 Pa	227 Pa	440 Pa
Moisture output	32 mg/H_2O/l @ VT 500 ml	31 mg/H_2O @ VT 500 ml	31 mg/H_2O/l @VT 500 ml	31 mg/H_2O/l @VT 500 ml	31.7 mg/H_2O/l
Tidal Volume Range	200-1500 ml	150-1500 ml	120-1500 ml	120-1500 ml	> 250 ml
Dead Space	66 ml	53 ml	34 ml	42 ml	
Connections	22M/15F - 22F/15M	22M/15F - 22F/15M	22M/15F - 22F/15M	22M/15F - 22F/15M	22F - 22M/15F
Sampling Port	Yes	Yes	Yes	Yes	Yes
Pyrogenicity	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml
Weight	30 g	27 g	21 g	21 g	38.50 g
Dimensions	h. 88.0 mm; w. 68.0 mm	h. 77.0 mm; w. 68.5 mm	h. 81.4 mm; w. 48.1 mm	h. 91.3 mm; w. 56.2 mm	h. 74 mm; w. 88 mm
Operating Temperature	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C
Storage Temperature	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C
Recommended Use	24 h	24 h	24 h	24 h	24 h

ECO MAXI 4333/750

Code	Description	Colour	Box Qty
4333/750ABSA	Adult Heat Moisture Exchanger (HME) bulk packed	Green	350
4333/750BRSA	Adult Heat Moisture Exchanger (HME) Clinic Clean blister packed	Green	50
4333/750BSSA	Adult Heat Moisture Exchanger (HME) Sterile blister packed	Green	50

ECO MAXI 4333/751

Code	Description	Colour	Box Qty
4333/751ABSA	Adult Heat Moisture Exchanger (HME) bulk packed	Green	350
4333/751BAUA	Adult Heat Moisture Exchanger (HME) Clinic Clean pouch packed	Green	200
4333/751BRSA	Adult Heat Moisture Exchanger (HME) Clinic Clean blister packed	Green	50
4333/751BSSA	Adult Heat Moisture Exchanger (HME) Sterile blister packed	Green	50

- Product is available without a luer lock gas sampling port as code 4333/752

ECO MIDI 9064/751

Code	Description	Colour	Box Qty
9064/751ABSA	Small Adult Heat Moisture Exchanger (HME) bulk packed	Green	350
9064/751BRSA	Small Adult Heat Moisture Exchanger (HME) Clinic Clean blister packed	Green	50
9064/751BSSA	Small Adult Heat Moisture Exchanger (HME) Sterile blister packed	Green	50

ECO MIDI 9065/750

Code	Description	Colour	Box Qty
9065/750ABSA	Small Adult Heat Moisture Exchanger (HME) bulk packed	Green	350
9065/750BRSA	Small Adult Heat Moisture Exchanger (HME) Clinic Clean blister packed	Green	50
9065/750BSSA	Small Adult Heat Moisture Exchanger (HME) Sterile blister packed	Green	50

TERMOFLOW FR003

Code	Description	Colour	Box Qty
FR003AKRET200A00	Adult HME Breathing Electrostatic Filter - THERMOFLOW bulk	Transparent	50
FR003SKRET200A00	Adult HME Breathing Electrostatic Filter - THERMOFLOW sterile	Transparent	50
FR003AKRET200D00	Adult HME Breathing Electrostatic Filter - THERMOFLOW bulk	Blue	50
FR003SKRET200D00	Adult HME Breathing Electrostatic Filter - THERMOFLOW sterile	Blue	50

ECO HME

Code	ECO MINI 9066/751	ECO MINI 9066/771	ECO MINI 9067/750
Version	STRAIGHT PEDIATRIC	STRAIGHT PEDIATRIC	ANGLED PEDIATRIC
Filtration Method	Electrostatic HME	Electrostatic HME	Electrostatic HME
Housing Material	Polypropylene	Polypropylene	Polypropylene
Filtration Media	Polyurethane foam	Corrugate paper	Polyurethane foam
Resistance @ 15L/min	12.5 Pa	12 Pa	11.5 Pa
Resistance @ 30L/min	38.5 Pa	35 Pa	34.5 Pa
Resistance @ 60L/min	133.5 Pa	110 Pa	101.5 Pa
Moisture output	37.4 mg/H_2O/l @VT 250 ml	35 mg/H_2O/l @VT 250 ml	35.7 mg/H_2O/l @VT 250 ml
Tidal Volume Range	90-1500 ml	90-1500 ml	90-1500 ml
Dead Space	26 ml	26 ml	31 ml
Connections	22M/15F - 22F/15M	22M/15F - 22F/15M	22M/15F - 22F/15M
Sampling Port	Yes	Yes	Yes
Pyrogenicity	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml
Weight	19 g	19 g	18 g
Dimensions	h. 73.0 mm; w. 48.0 mm	h. 73.0 mm; w. 48.0 mm	h. 83.0 mm; w. 58.0 mm
Operating Temperature	5°C - 40°C	5°C - 40°C	5°C - 40°C
Storage Temperature	0°C - 55°C	0°C - 55°C	0°C - 55°C
Recommended Use	24 h	24 h	24 h

ECO MINI 9066/751

Code	Description	Colour	Box Qty
9066/751ABSA	Pediatric Heat Moisture Exchanger (HME) bulk packed	Green	350
9066/751BAUA	Pediatric Heat Moisture Exchanger (HME) Clinic Clean pouch packed	Green	200
9066/751BRSA	Pediatric Heat Moisture Exchanger (HME) Clinic Clean blister packed	Green	50
9066/751BSSA	Pediatric Heat Moisture Exchanger (HME) Sterile blister packed	Green	50

ECO MINI 9066/771

Code	Description	Colour	Box Qty
9066/771ABSA	Pediatric Heat Moisture Exchanger (HME) bulk packed	Green	350
9066/771BAUA	Pediatric Heat Moisture Exchanger (HME) Clinic Clean pouch packed	Green	200
9066/771BRSA	Pediatric Heat Moisture Exchanger (HME) Clinic Clean blister packed	Green	50
9066/771BSSA	Pediatric Heat Moisture Exchanger (HME) Sterile blister packed	Green	50

ECO MINI 9067/750

Code	Description	Colour	Box Qty
9067/750ABSA	Pediatric Heat Moisture Exchanger (HME) bulk packed	Green	350
9067/750BAUA	Pediatric Heat Moisture Exchanger (HME) Clinic Clean pouch packed	Green	200
9067/750BRSA	Pediatric Heat Moisture Exchanger (HME) Clinic Clean blister packed	Green	50
9067/750BSSA	Pediatric Heat Moisture Exchanger (HME) Sterile blister packed	Green	50

Products Independently tested, data available upon request

ECO HME

Code	ECO MICRO 9080/750	ECO MICRO 9085/751	ECO MICRO 9085/771
Version	ANGLED NEONATAL	STRAIGHT NEONATAL PEDIATRIC	STRAIGHT NEONATAL PEDIATRIC
Filtration Method	Electrostatic HME	Electrostatic HME	Electrostatic HME
Housing Material	Polypropylene	Polypropylene	Polypropylene
Filtration Media	Polyurethane foam	Polyurethane foam	Polyurethane foam
Resistance @ 5L/min	6.8 Pa	43 Pa	45 Pa
Resistance @ 10L/min	15.24 Pa	111 Pa	115 Pa
Resistance @ 15L/min	22.54 Pa	204 Pa	205 Pa
Moisture output	30.6 mg/H_2O/l @VT 250 ml	28.5 mg/H_2O/l @VT 250 ml	32 mg/H_2O/l @VT 250 ml
Tidal Volume Range	> 45 ml	> 10 ml	> 10 ml
Dead Space	10.5 ml	3 ml	3 ml
Connections	22M/15F - 15M	15F - 15M	15F - 15M
Sampling Port	Yes	No	No
Pyrogenicity	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml
Weight	9 g	3 g	3 g
Dimensions	h. 59.2 mm; w. 37.0 mm	h. 38.2 mm; w. 21.7 mm	h. 38.2 mm; w. 21.7 mm
Operating Temperature	5°C - 40°C	5°C - 40°C	5°C - 40°C
Storage Temperature	0°C - 55°C	0°C - 55°C	0°C - 55°C
Recommended Use	24 h	24 h	24 h

ECO MICRO 9080/750

Code	Description	Colour	Box Qty
9080/750ABSA	Neonatal Heat Moisture Exchanger Filter (HME) Bulk Packed	Green	350
9080/750BAUA	Neonatal Heat Moisture Exchanger Filter (HME) Clinic Clean pouch packed	Green	200
9080/750BRSA	Neonatal Heat Moisture Exchanger Filter (HME) Clinic Clean blister packed	Green	50
9080/750BSSA	Neonatal Heat Moisture Exchanger Filter (HME) Sterile blister packed	Green	50

ECO MICRO 9085/751

Code	Description	Colour	Box Qty
9085/751ABSA	Pediatric/Neonatal HME/Low Volume Tracheostomy bulk packed	Green	350
9085/01BAUA	Pediatric/Neonatal HME/Low Volume Tracheostomy Clinic Clean pouch packed	Transparent	200
9085/751BRSA	Pediatric/Neonatal HME/Low Volume Tracheostomy Clinic Clean blister packed	Green	50
9085/751BSSA	Pediatric/Neonatal HME/Low Volume Tracheostomy Sterile blister packed	Green	50

ECO MICRO 9085/771

Code	Description	Colour	Box Qty
9085/771ABSA	Pediatric/Neonatal HME/Low Volume Tracheostomy bulk packed	Green	350
9085/01BAUA	Pediatric/Neonatal HME/Low Volume Tracheostomy Clinic Clean pouch packed	Transparent	200
9085/771BRSA	Pediatric/Neonatal HME/Low Volume Tracheostomy Clinic Clean blister packed	Green	50
9085/771BSSA	Pediatric/Neonatal HME/Low Volume Tracheostomy Sterile blister packed	Green	50

COMFORT-FIT

Code	8866/01	8866/100	8866/50
Version	STRAIGHT ADULT	STRAIGHT ADULT	STRAIGHT ADULT
Filtration Method	Bacterial Viral	Electrostatic HMEF	Electrostatic HME
Housing Material	Polypropylene	Polypropylene	Polypropylene
Filtration Media	Electrostatic Synthetic Fiber	Polyurethane foam	Polyurethane foam
Filtration Efficiency BFE	N.A.	99.99996%	N.A.
Filtration Efficiency VFE	N.A.	99.9997%	N.A.
Resistance @ 30L/min	72 pa	96 pa	98 Pa
Resistance @ 60L/min	192.5 Pa	267 Pa	N.A
Resistance @ 90L/min	340.5 Pa	539 Pa	N.A
Moisture loss	N.A.	29 mg/H_2O/l @ VT 500 ml	11.4 mg/H_2O/l @ VT 500 ml
Tidal Volume Range	200-1500 ml	90-1500 ml	90-1500 ml
Effective Filtration Area	33.43 cm^2	33.43 cm^2	33.43 cm^2
Filter Efficiency	97.29%	84%	84%
Dead Space	57 ml	76 ml	57 ml
Connections	22M/15F - 22F/15M	22M/15F - 22F/15M	22M/15F - 22F/15M
Sampling Port	Yes	Yes	Yes
Pyrogenicity	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml
Weight	29 g	29 g	29 g
Dimensions	h. 107.0 mm; w. 60.5 mm	h. 107.0 mm; w. 60.5 mm	h. 107 mm x w. 60.5 mm
Operating Temperature	5°C - 40°C	5°C - 40°C	5°C - 40°C
Storage Temperature	0°C - 55°C	0°C - 55°C	0°C - 55°C
Recommended Use	24 h	24 h	24 h

COMFORT-FIT 8866/01

Code	Description	Colour	Box Qty
8866/01ABSA	Adult Electrostatic Comfort Fit Bacterial/Viral Filter bulk packed	Transparent	350
8866/01BAUA	Adult Electrostatic Comfort Fit Bacterial/Viral Filter Clear Clinic Clean pouch packed	Transparent	200
8866/01BASA	Adult Electrostatic Comfort Fit Bacterial/Viral Filter Clear Clinic Clean bag packed	Transparent	50
8866/01BRSA	Adult Electrostatic Comfort Fit Bacterial/Viral Filter Clear Clinic Clean blister packed	Transparent	50

COMFORT-FIT 8866/100

Code	Description	Colour	Box Qty
8866/100ABSA	Adult Electrostatic Filter and HME (HMEF) bulk packed	Transparent	350
8866/100BAUA	Adult Electrostatic Filter and HME (HMEF) Clear Clinic Clean pouch packed	Transparent	200
8866/100BRSA	Adult Electrostatic Filter and HME (HMEF) Clear Clinic Clean blister packed	Transparent	50
8866/100BSSA	Adult Electrostatic Filter and HME (HMEF) Clear Sterile blister packed	Transparent	50

COMFORT-FIT 8866/50

Code	Description	Colour	Box Qty
8866/50ABSA	Adult Electrostatic ECO Comfort Fit HME bulk packed	Transparent	50
8866/50BAUA	Adult Electrostatic ECO Comfort Fit HME Clear Clinic Clean pouch packed	Transparent	200
8866/50BRSA	Adult Electrostatic ECO Comfort Fit HME Clear Clinic Clean blister packed	Transparent	50

HME HUMI-TRAQ Filters | Electrostatic Tracheal HME

Products Independently tested, data available upon request

HUMI-TRAQ

The GVS HME thacheal filters are the ideal heat and moisture exchanger product family for prolonged use with spontaneously breathing patients with a tracheostomy tube.

- Maximum comfort and minimal protrusion
- Minimises the drag on the tracheostomy tube
- Full compatibility with breathing systems

Code	Tracheal HME 9500/01	Trach. HME - T Model 9500/710	Trach. HME - T Model 9500/750
Version	ADULT	ADULT	ADULT
Filtration Method	Electrostatic HME	Electrostatic HME	Electrostatic HME
Housing Material	Polypropylene	Polypropylene	Polypropylene
Filtration Media	Polyurethane foam	Hygroscopic cellulose	Polyurethane foam
Resistance @ 30L/min	35 Pa	50 Pa	22 Pa
Resistance @ 60L/min	N.A	114 Pa	70 Pa
Resistance @ 90L/min	N.A	201 Pa	135 Pa
Moisture loss	27 mg/H_2O/l @ VT 500 ml	25.9 mg/H_2O/l @ VT 500 ml	27.8 mg/H_2O/l @ VT 500 ml
Tidal Volume Range	> 25 ml	> 25 ml	> 25 ml
Dead Space	8 ml	8.4 ml	15 ml
Connections	Bi Directional HME 22 mm F ISO	15 mm Patient Connector	Bi Directional HME
Sampling Port	Yes	No	No
Pyrogenicity	< 0,25 Eu/ml	< 0,25 Eu/ml	< 0,25 Eu/ml
Weight	4,4 g	3,5 g	3,5 g
Dimensions	h. 30.0 mm; w. 36.0 mm	h. 38.5 mm; w. 28.5 mm	h. 38.5 mm; w. 28.5 mm
Operating Temperature	5°C - 40°C	5°C - 40°C	5°C - 40°C
Storage Temperature	0°C - 55°C	0°C - 55°C	0°C - 55°C
Recommended Use	24 h	24 h	24 h

Tracheal HME 9500/01

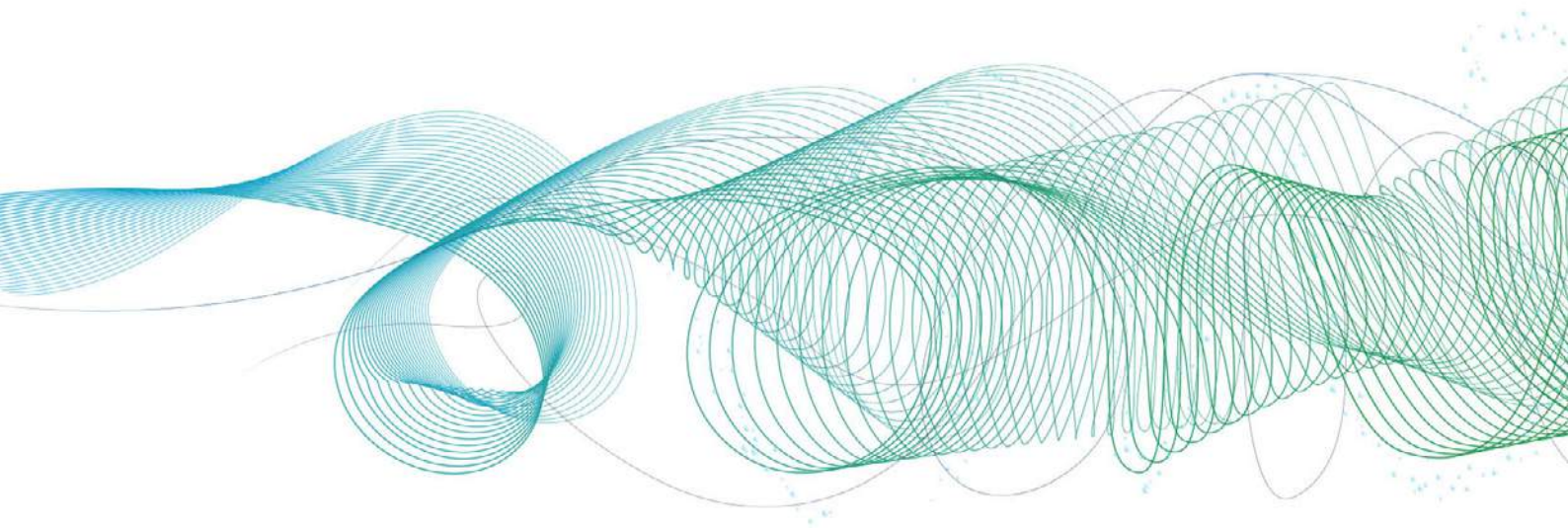
Code	Description	Colour	Box Qty
9500/01ABSB	Adult Tracheal HME Clear bulk packed	Transparent	350
9500/01BAUB	Adult Tracheal HME Clear Clinic Clean pouch packed	Transparent	200
9500/01BRSB	Adult Tracheal HME Clear Clinic Clean blister packed	Transparent	50
9500/01BSSB	Adult Tracheal HME Clear Sterile blister packed	Transparent	50

Tracheal HME 9500/710

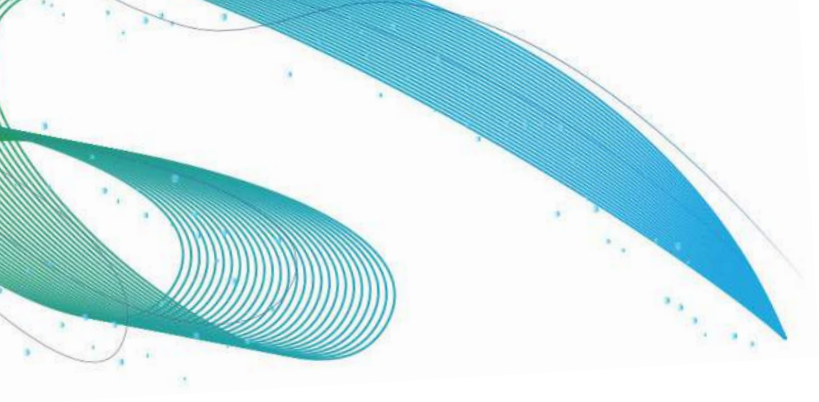
Code	Description	Colour	Box Qty
9500/710ABSA	Adult Eco Micro Tracheal HME Clear bulk packed	Transparent	350
9500/710BAUA	Adult Eco Micro Tracheal HME Clear Clinic Clean pouch packed	Transparent	200
9500/710BRSA	Adult Eco Micro Tracheal HME Clear Clinic Clean blister packed	Transparent	50
9500/710BSSA	Adult Eco Micro Tracheal HME Clear Sterile blister packed	Transparent	50

Tracheal HME 9500/750

Code	Description	Colour	Box Qty
9500/750ABSA	Adult Eco Micro Tracheal HME bulk packed	Transparent	350
9500/750BAUA	Adult Eco Micro Tracheal HME Clinic Clean pouch packed	Transparent	200
9500/750BRSA	Adult Eco Micro Tracheal HME Clinic Clean blister packed	Transparent	50
9500/750BSSA	Adult Eco Micro Tracheal HME Sterile blister packed	Transparent	50



Spirometry
Filters & Accessories



GVS Lung Function Test Filters

Pulmonary function tests are used to measure breathing and how well the lungs are functioning.
The main tests carried out are Spirometry, Diffusion and Body Plethysmography.

Spirometry

Spirometry is the most common of the lung function tests, measuring lung function, in particular the amount (volume) and/or speed (flow) of air that can be inhaled and exhaled. Spirometry is an important tool used to assess conditions such as asthma, pulmonary fibrosis, cystic fibrosis, and COPD (Chronic Obstructive Pulmonary Disease). The spirometry test is performed using an instrument called a spirometer. During spirometry test, the patient places their mouth over a mouthpiece connected to the spirometer, takes a deep breath in and then blows out as forcefully as possible.

Lung Diffusion Test

It assesses how well oxygen passes from the lung's air sacs (alveoli) into the blood stream. This test measures the diffusing capacity of the lungs for carbon monoxide. During the test the patient is sitting down, a mouthpiece is fit tightly around the mouth and a nose clip positioned to prevent breathing via the nose during the test. The patient then inhales a small amount of carbon monoxide gas, holds the breath for 10 seconds and then exhales as fast as possible. The exhaled gas is then analysed to determine how much carbon monoxide the body absorbed during the breath.

Peak Flow Test

The peak flow test (peak expiratory flow test or PEF) is a lung function test to measure how fast a person can breathe out. The peak flow test is performed using a device peak flow meter. During the test the patient takes a full breath in, then blows out as fast as possible into the flow meter, the measurement taken is the peak flow.

Different pulmonary function tests measurements include:

VC - Vital Capacity	The volume of air exhaled from the lungs after a full inhalation
FVC - Forced Vital Capacity	The volume of air forcibly exhaled from the lungs after taking the deepest breath possible
RV - Residual Volume	The volume of air remaining in the lungs after exhalation
TLC - Total Lung Capacity	The maximum volume of air that the lungs can hold
FEV1 - Forced Expiratory Volume in One Second	The volume of air which can be forcibly exhaled from the lungs in the first second of a forced exhalation
FEV1/FVC-FEV1 - Percent (FEV1%)	The ratio of FEV1 to FVC tells the clinician what percentage of the total amount of air is exhaled from the lungs during the first second of forced exhalation
PEFR - Peak Expiratory Flow Rate	Measures if treatment is effective in improving airway diseases such as COPD
FEF - Forced Expiratory Flow	Measures exhaled volume of air to indicate if a large airway obstruction is present
MVV - Maximum Voluntary Ventilation	A value determined by having the patient inhale and exhale as rapidly and fully as possible in 12 seconds. The results reflect the status of the muscles used for breathing, how stiff the lungs are and if there is any resistance in the airways. Indicating how strong a patient's lungs are prior to surgery. Poor performance suggests that respiratory complications may occur after surgery

Body plethysmography

Body plethysmography is a pulmonary function test that determines how much air is in the patient's lungs after taking a deep breath. It also measures the amount of air left in the lungs after the patient exhales as much as they can.

Advantages of using Bacterial Air Filters for Pulmonary Function Testing

Pulmonary tests require an Air Filter to be placed between the patient and the lung function equipment. The reasons for this are explained below:
- To protect the equipment components, as infective droplets may be expelled and potentially degrade the equipment.
- To minimize the risk of cross infection: by far the greatest risk would be for a subsequent patient carrying out the same test, who could inhale any infective droplets deposited in the machine. The potential danger of this is demonstrated by the fact that the infective dose for a disease, such as tuberculosis, may be as low as than 10 bacteria. Patients with chronic respiratory diseases will be at increased risk of respiratory infection.

It is always recommended to calibrate the equipment with the filter installed, as this last will cause resistance that could affect the results of the tests.

Selecting the Air Filter

The design of air filters for use in lung function equipment needs to take three factors into account:
- The Air Flow rate.
- The level of Resistance.
- The Efficiency of the filter at preventing particulate penetration.

GVS Spirometry Filters

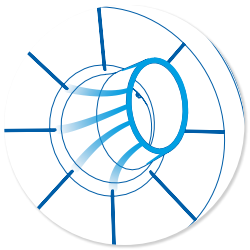
GVS provides Filters for Lung Function Testing (Spiroguard) with proven filtration efficiency of 99,9999% up to 0,027 micron. GVS Spiroguard enables testing without the risk of cross contamination for patients and health care professionals, as well as equipment. GVS's compact design Spiroguard are all manufactured to a high quality and hygienically packed in a clean room to ensure maximum protection against contamination.

GVS Filter Media

GVS Spiroguard utilise an electrostatically charged synthetic media. The positive and negative charge on filter fibres is generated during the manufacturing process and enhances the filter's ability to attract particulate matter. Unlike other spirometry filters, GVS's electrostatic filter media is covered in a protective scrim layer. This prevents fibres becoming loose, blocking the spirometer and therefore enhancing protective performance against harmful contamination.
The filter media has hydrophobic properties to minimise droplet contamination, as well as providing a low resistance and low dead space to improve the validity and consistency of respiratory testing results and minimise rebreathing.

Electrostatic Spirometry Filter with integral mouthpiece

Materials
Filter media: Electrostatic
Housing: Polypropylene
Filter Media
200 g Electrostatic Blended Synthetic Fiber
Flow Resistance
@ 30 L/min in accordance with EN ISO 9360-1: < 30 Pa (< 0.3 cm H_2O)
@ 60 L/min in accordance with EN ISO 9360-1: < 60 Pa (< 0.6 cm H_2O)
@ 90 L/min in accordance with EN ISO 9360-1: < 100 Pa (< 1 cm H_2O)
Filtration Efficiency
BFE 99.9999%* up to 0.027 µm
VFE 99.9998%* up to 0.027 µm
Effective Filtration Area
60 cm²
Pyrogenicity
< 0.25 EU/ml
Dead space
80 ml
Weight
37.2 g
Dimensions
h. 92.65 mm; w. 96.8 mm

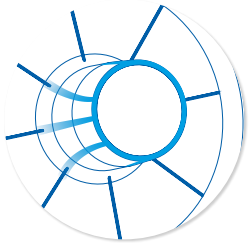


Code	Description	Box Qty
2800/21BAUC	Electrostatic Filter Clinic Clean bag packed	200
2800/21ABUC	Electrostatic Filter bulk packed	200

Packaging: Quantity/Box 50 units. BAUC version Shipping Box 200 units.
* Independently tested, data available upon request
A range of adaptors are available for the limited number of devices this filter does not fit directly.

Electrostatic Spirometry Filter

Materials
Filter media: Electrostatic
Housing: Polypropylene
Filter Media
200 g Electrostatic Blended Synthetic Fiber
Flow Resistance
@ 30 L/min in accordance with EN ISO 9360-1: < 30 Pa (< 0.3 cm H_2O)
@ 60 L/min in accordance with EN ISO 9360-1: < 56 Pa (< 0.56 cm H_2O)
@ 90 L/min in accordance with EN ISO 9360-1: < 103 Pa (< 1.03 cm H_2O)
Filtration Efficiency
BFE 99.9999%* up to 0.027 µm
VFE 99.9998%* up to 0.027 µm
Effective Filtration Area
60 cm²
Pyrogenicity
< 0.25 EU/ml
Dead space
81.5 ml
Weight
37.2 g
Dimensions
h. 92.65 mm; w. 96.8 mm



Code	Description	Box Qty
2800/22BAUF	Electrostatic Filter Clinic Clean bag packed	200
2800/22ABUF	Electrostatic Filter bulk packed	200

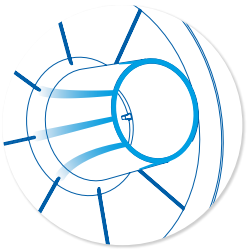
Packaging: Quantity/Box 50 units. BAUF version Shipping Box 200 units.
* Independently tested, data available upon request
A range of adaptors are available for the limited number of devices this filter does not fit directly.

spir guard
ELECTROSTATIC SPIROMETRY FILTER

Electrostatic Spirometry Filter for Peak Flow Meter

The incidence of tuberculosis is on the increase, although diagnosis may only come after a series of tests. The highly infectious nature of TB requires protection for staff and other patients during this process. Preventing contamination of Peak Flow meters is an important step in reducing the risk of cross-infection.

Materials
Filter media: Electrostatic
Housing: Polypropylene
Filter Media
200 g Electrostatic Blended Synthetic Fiber
Flow Resistance
@ 30 L/min in accordance with EN ISO 9360-1: < 34 Pa (< 0.34 cm H_2O)
@ 60 L/min in accordance with EN ISO 9360-1: < 67 Pa (< 0.67 cm H_2O)
@ 90 L/min in accordance with EN ISO 9360-1: < 123 Pa (< 1.23 cm H_2O)
Filtration Efficiency
BFE 99.9999%* up to 0.027 µm
VFE 99.9998%* up to 0.027 µm
Effective Filtration Area
60 cm²
Pyrogenicity
< 0.25 EU/ml
Dead space
81.5 ml
Weight
37.2 g
Dimensions
h. 85 mm; w. 96.8 mm



Code	Description	Box Qty
2800/17BAUF	Electrostatic Spirometry Filter for use with Peak Flow Meter Clinic clean bag packed	200

Packaging: Quantity/Box 50 units. Shipping Box 100 units.
* Independently tested, data available upon request

Electrostatic Spirometry Filter Kit

Materials
Filter media: Electrostatic
Housing: Polypropylene
Filter Media
200 g Electrostatic Blended Synthetic Fiber
Flow Resistance
@ 30 L/min in accordance with EN ISO 9360-1: < 30 Pa (< 0.3 cm H_2O)
@ 60 L/min in accordance with EN ISO 9360-1: < 56 Pa (< 0.56 cm H_2O)
@ 90 L/min in accordance with EN ISO 9360-1: < 103 Pa (< 1.03 cm H_2O)
Filtration Efficiency
BFE 99.9999%* up to 0.027 µm
VFE 99.9998%* up to 0.027 µm
Effective Filtration Area
60 cm²
Pyrogenicity
< 0.25 EU/ml
Dead space
81.5 ml
Weight
37.2 g
Dimensions
h. 92.65 mm; w. 96.8 mm
Nose Clip
Dimensions
h. 66.0 mm; w. 41.8 mm
Material
Polypropylene and foam pads
Flexible Bitegrip
Dimensions
ID. 32.0 mm; OD. 36.0 mm
Material
TPE (Thermo Plastic Elastomer)

Code	Description	Box Qty
2800/22DAKBAUF	Electrostatic Spirometry Filter Kit clinic clean bag packed	100

Packaging: Quantity/Box 50 units. Shipping box 100 units.
* Independently tested, data available upon request
A range of adaptors are available for the limited number of devices this filter does not fit directly.

Nose Clip

Dimensions
h. 66.0 mm; w. 41.8 mm
Material
Polypropylene and foam pads
Ordering information:

Product Code	Description
A508BAUA	Disposable Noseclip Clinic Clean pouch packed
A508BPUA	Disposable Noseclip bulk packed

Packaging: Quantity/Box 50 units. BAUA version Shipping Box 400 units.

Flexible Bitegrip

Dimensions
ID. 32.0 mm; OD. 36.0 mm
Material
TPE (Thermo Plastic Elastomer)
Ordering information:

Product Code	Description
A539BAUB	Flexible Bite Grip Mouthpiece Clinic Clean bag packed
A539ABUA	Flexible Bite Grip Mouthpiece bulk packed

Packaging: Quantity/Box 50 units.

Mouthpiece

Dimensions
h. 60.0 mm; w. 31.5 mm
Material
White HDPE
Connections
22 mm Male conical connectors, based on internal diameter *
Ordering information:

Product Code	Description
A571BAUA	Multi-Functional Medical Mouthpiece Clinic Clean bag packed
A571ABUA	Multi-Functional Medical Mouthpiece bulk packed

Packaging: Quantity/Box 50 units. BAUA version Shipping Box 300 units.
* Fits GVS Spiroguard products – 2800 range

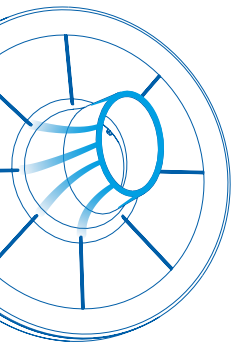
Adaptor Series

Spiroguard will fit most diffusion, lung volume and Bodyplethysmograph machines. A range of 29 adaptors are available where a different diameter connector is required.
Supplied individually upon customer request.

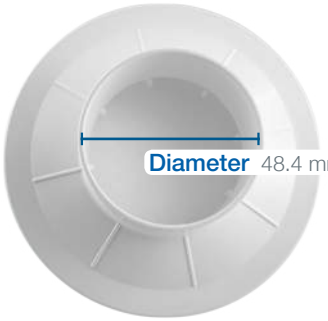
Ordering information:

Product Code	Description
2802/01-29	Adaptors

Spiroguard Filters Diameters and Connections



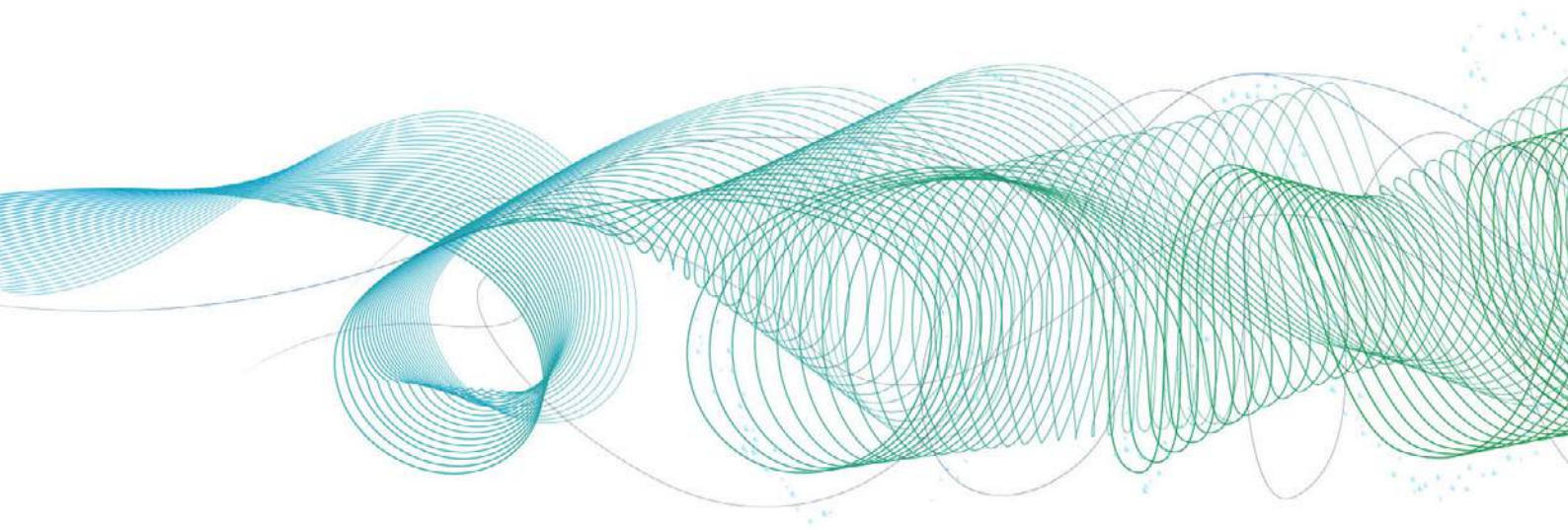
Code	Filter Media	Housing material	Female		Male	
			O/D	I/D	O/D	I/D
2800/01	Electrostatic Fibre, 200g	High Impact PolyStyrene (HIPS)	34	30.1	29.2	26.1
2800/02	Electrostatic Fibre, 200g	High Impact PolyStyrene (HIPS)	34	28.2	29.2	26.7
2800/03	Electrostatic Fibre, 200g	High Impact PolyStyrene (HIPS)	34	31	29.2	26.7
2800/10	Electrostatic Fibre, 200g	PolyPropylene	34	30.5	29.2	26.7
2800/11	Electrostatic Fibre, 200g	PolyPropylene	30.65	26.5	Mouthpiece	
2800/15	Electrostatic Fibre, 200g	PolyPropylene	30.65	26.5	25	20.8
2800/17	Electrostatic Fibre, 200g	PolyPropylene	29.3	26.5	29.2	26.7
2800/21	Electrostatic Fibre, 200g	PolyPropylene	34	29.3	Mouthpiece	
2800/22	Electrostatic Fibre, 200g	PolyPropylene	34	29.3	31.2	26.7
2800/23	Electrostatic Fibre, 200g	PolyPropylene	48.4	44.35	Mouthpiece	
2800/24	Electrostatic Fibre, 200g	PolyPropylene	48.4	44.35	30	26.7
2800/25	Electrostatic Fibre, 200g	PolyPropylene	35	29.1	Mouthpiece	
2800/26	Electrostatic Fibre, 200g	PolyPropylene	35	29.1	31.2	26.7
2800/30	Electrostatic Fibre, 200g	PolyPropylene	29.2	27.2	Mouthpiece	

Machine Side	Patient Side	Patient Side
		
Diameter 48.4 mm	Product code: 2800/23	Product code: 2800/24

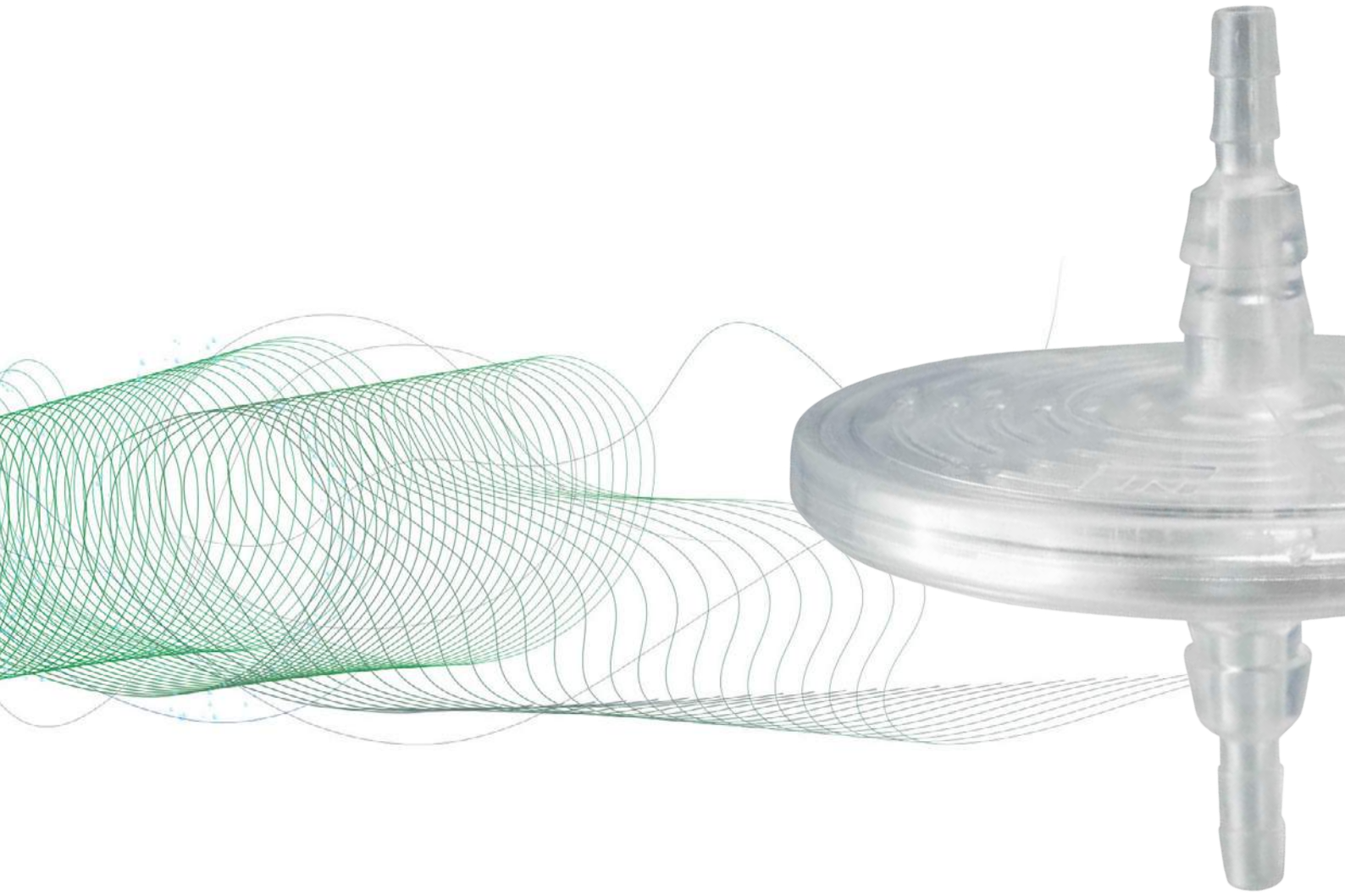
GVS Spirometry Filters fit the following instruments using the listed adaptors:

Code	Machine end connector		Filter end connector	Instrument
	ID	OD	ID	
2802/01	29	35.2	34.3	
2802/02	28.9	34	34.3	Jaeger
2802/03	30.9	36	34.3	Gould Pulmonet Closed System Gould Pulmonet Bodyplethysmograph V Max Diffusion V Max Bodyplethysmograph Sensormedics Autobox /Sensormedics Vmax
2802/04	22.4	31	34.3	P.K. Morgan Autolink Diffusion P.K. Morgan USA-Model C Diffusion Medisoft Part'n Air 5500 Diffusion Medisoft Part'n Air 5500 Bodyplethysmograph
2802/05	28.4	40	34.3	P.K. Morgan USA-Model C Lung Volume P.K. Morgan Autolink Lung Volume
2802/06	28.8	40	34.3	P.K. Morgan USA-Model C Bodyplethysmograph P.K. Morgan Autolink Bodyplethysmograph
2802/07	45.5	51	34.3	Koko
2802/08	31.2	38.6	34.3	Glenfield
2802/09	35.7	40	34.3	Vitagraph Tamarac Burdick CDX
2802/10	22.4	28.4	34.3	Collins CPL SMC100 Schiller DLCO
2802/11	26.5	29.3	34.3	
2802/12	26.5	30.2	34.3	Micromedical Turbine
2802/13	25.8	28.4	34.3	Cosmed Q BOX
2802/14	25.8	28.4	29.3	
2802/15	25.8	28.4	34.3	nSpire CPL nSpire HD PFT 4000
2802/16	31.5	35	34.3	Collins Cybermedic Spinaker Exel / MCG SpiroTube / Spirovit Koko Moe
2802/17	34.9	39	34.3	Bomi-Med Air Flow Meter

Code	Machine end connector		Filter end connector	Instrument
	ID	OD	ID	
2802/18	27	30.1	34.3	Vitalograph SpiroDoc Vitalograph Alpha Vitalograph Alpha Touch Vitalograph Compact Vitalograph Gold Standard Vitalograph Gold Standard Plus Vitalograph In2itive Vitalograph Micro Vitalograph Pneumotrac SDI Diagnostics SBG SDI Diagnostics 29-1010 Spirolab SDI Diagnostics Astra 100 SDI Diagnostics Astra 200 SDI Diagnostics Astra 300 SDI Diagnostics AstraTouch MIR MiniSpir 910580 MIR Spirobank 910513 MIR Spirobank G 910512 MIR Spirobank II 910575 MIR SpiroLab III 910650 MIR Spirotel MST1 MultiSpiro (old) Keystone (old) CB / Cosmed Pony Spirolite 303 / Spirolite 323 Spirometrics 2014 Puritan Bennett S&M / Clement Clarke VM1 Clement Clarke VMX
2802/19	28.8	40	34.3	
2802/20	30.7	33.1	34.3	Cybermedic CM3 Gould Jones Satellite
2802/21	30	31.2	34.3	
2802/22	28.5	35	29.2	PB Renaissance Spirotech Ohio Collins Survey
2802/23	22.1	34	34	
2802/24	31.5	40	34.3	Cranlea
2802/25	34.9	39	34.3	Brentwood 4000
2802/27	40.6	43.4	34.3	Brentwood Burdick Fukuda
2802/28	29.2	32.2	34.3	Clement Clark One Flow
2802/30	28.5	N.A.	30	Medisoft



Device
Filtration



Expiratory - Ventilator Filters | HEPA

Products Independently tested, data available upon request

A filtration solution for ventilators

The GVS ventilator filters reduce particles and bacteria in patients' exhaled gas, protect the ventilator's exhalation and hospital personnel from airborne pathogens.

Code	4020/01	4020/02	4020/03	4020/06
Version	STRAIGHT	STRAIGHT	STRAIGHT	STRAIGHT
Housing Material	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Filtration Media	Hydrophobic Glass Microfibre Media	Hydrophobic Glass Microfibre Media	Mechanical HEPA	Hydrophobic Glass Microfibre Media
Filtration Efficiency BFE	99,9999%	99,999989%	99,9999%	99,991%
Filtration Efficiency VFE	99,9999%	99,99985%	99,9999%	99,986%
Resistance @ 30L/min	164 Pa	144	140 Pa	95 Pa
Resistance @ 60L/min	345 Pa	302.5	292 Pa	194 Pa
Resistance @ 90L/min	542 Pa	483.5	458 Pa	315 Pa
Effective Filtration Area	420 cm^2	420 cm^2	520 cm^2	520 cm^2
Filter Efficiency	99.977%	99.98%	99.987%	99.5%
Dead Space	55 ml	55ml	44 ml	44 ml
Connections	22M/22F	22mm M / 22mm F	22M/15F	22M - 15F
Sampling Port	No	No	No	No
Pyrogenicity	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml	<0.25 Eu/ml
Weight	40 g	35 g	40 g	38 g
Dimensions	h. 73 mm; w. 68.5 mm	h. 75 mm; w. 68 mm	h. 78; w. 68.5 mm	h. 75 mm; w. 68 mm
Operating Temperature	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C
Storage Temperature	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C

4020/01

Code	Description	Colour	Box Qty
4020/01ABUA	Adult Mechanical HEPA Filter Machine side Long Term anesthesia / ventilation Clear bulk packed	Transparent	200
4020/01BAUA	Adult Mechanical HEPA Filter Machine side Long Term anesthesia / ventilation Clear Clinc Clean pouch packed	Transparent	500

4020/02

Code	Description	Colour	Box Qty
4020/02ABUA	Adult Mechanical HEPA Filter Machine side Long Term anesthesia / ventilation Clear bulk packed	Transparent	200
4020/02BAUA	Adult Mechanical HEPA Filter Machine side Long Term anesthesia / ventilation Clear Clinc Clean pouch packed	Transparent	500

4020/03

Code	Description	Colour	Box Qty
4020/03ABUA	Adult Mechanical HEPA Filter Machine side Long Term anesthesia / ventilation Clear bulk packed	Transparent	200
4020/03BAUA	Adult Mechanical HEPA Filter Machine side Long Term anesthesia / ventilation Clear Clinc Clean pouch packed	Transparent	500

4020/06

Code	Description	Colour	Box Qty
4020/06ABSA	Adult Mechanical HEPA Filter Machine side Long Term anesthesia / ventilation Clear bulk packed	Transparent	350
4020/06BAUA	Adult Mechanical HEPA Filter Machine side Long Term anesthesia / ventilation Clear Clinc Clean pouch packed	Transparent	200
4020/06BRSA	Adult Mechanical HEPA Filter Machine side Long Term anesthesia / ventilation Clear Clinc Clean blister packed	Transparent	50

Expiratory - Ventilator Filters | HEPA

Products Independently tested, data available upon request

MULTI VENT
• PORTABLE VENTILATOR FILTER •

Code	3000/03	3000/04	3000/740	1200/08	1200/20
Housing Material	Styrene - Butadiene Copolymer	Styrene - Butadiene Copolymer	Styrene - Butadiene Copolymer	Polycarbonate	Polycarbonate
Filtration Media	Hydrophobic Glass Microfibre Media	Hydrophobic Glass Microfibre Media	Hydrophobic Glass Microfibre Media	Hydrophobic Glass Microfibre Media	Hydrophobic Glass Microfibre Media
Filtration Efficiency BFE	99.9999%	99.9999%	99.9999%	99.9999%	99.999%
Filtration Efficiency VFE	99.9999%	99.999%	99.9999%	99.9999%	99.999%
Effective Filtration Area	2167,50 cm^2	2167,50 cm^2	2167,50 cm2	515 cm^2	515 cm^2
Autoclavable	No	No	No	Up to 20 times	Up to 5 times
Connections	22 mm ISO Connector	22 mm ISO Connector	15F/22M - 22F	22M/15F – 22F/15M	22M-15F
Pyrogenicity	< 0,25 Eu/ml	< 0,25 Eu/ml	< 0,25 Eu/ml	< 0,25 Eu/ml	< 0,25 Eu/ml
Weight	17,9 g	17,9 g	17,9 g	40 g	38 g
Operating Temperature	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C	5°C - 40°C
Storage Temperature	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C	0°C - 55°C

3000/03

Code	Description	Colour	Box Qty
3000/03DAUA	Multi Ventilator Filter clinic clean bag packed	White	12

3000/04

Code	Description	Colour	Box Qty
3000/04DAUA	Multi Ventilator Filter clinic clean bag packed	White	12

3000/740

Code	Description	Colour	Box Qty
3000/740ABSA	Multi Ventilator Filter bulk	White	60
3000/740BASA	Multi Ventilator Filter clinic clean bag packed	White	60

1200/08

Code	Description	Colour	Box Qty
1200/08HAUB	Reusable Hepa Filter clinic clean bag packed	White	50

1200/20

Code	Description	Colour	Box Qty
1200/20HAUA	Reusable Hepa Filter Clinic Clean bag packed	White	50

Medguard & Sca-Niox Filters

Products Independently tested, data available upon request

MEDGUARD
• FILTER FOR NEBULIZER THERAPY MACHINE •

Code	1420/01	1420/03
Filtration Method	Electrostatic	Electrostatic
Housing Material	Styrene	Styrene
Filtration Efficiency BFE	99.999%	99.999%
Filtration Efficiency VFE	99.999%	99.999%
Resistance @ 30L/min	40 Pa	40 Pa
Connections	22F-22M	22F-22M
Weight	23.5 g	23.5 g
Dimensions	h. 96 mm; w. 69 mm	h. 96 mm; w. 69 mm
Operating Temperature	5°C - 40°C	5°C - 40°C

1420/01

Code	Description	Colour	Box Qty
1420/01ABUA	Filter for nebulizer therapy machine bulk packed	Transparent	400
1420/01BAUA	Filter for nebulizer therapy machine Clinic Clean pouch packed	Transparent	200

1420/03

Code	Description	Colour	Box Qty
1420/03ABUA	Filter for nebulizer therapy machine bulk packed	Transparent	400
1420/03BAUA	Filter for nebulizer therapy machine Clinic Clean pouch packed	Transparent	200

SCA-NIOX
• NITRIC OXIDE SCAVENGER FILTERS •

Code	1898/01	1898/03
Filtration Method	Electrostatic	Carbon disc and Electrostatic media
Housing Material	Clear Styrene	Clear Styrene
Filtration Efficiency BFE	99.999%	99.999%
Filtration Efficiency VFE	99.999%	99.999%
Connections	22M/15F - 22F/15M	22M/15F-22F/15M
Weight	72 g	72 g
Dimensions	h. 94.8 mm; w. 64.7 mm	h. 94.8 mm; w. 64.7 mm
Operating Temperature	5°C - 40°C	5°C - 40°C

1898/01

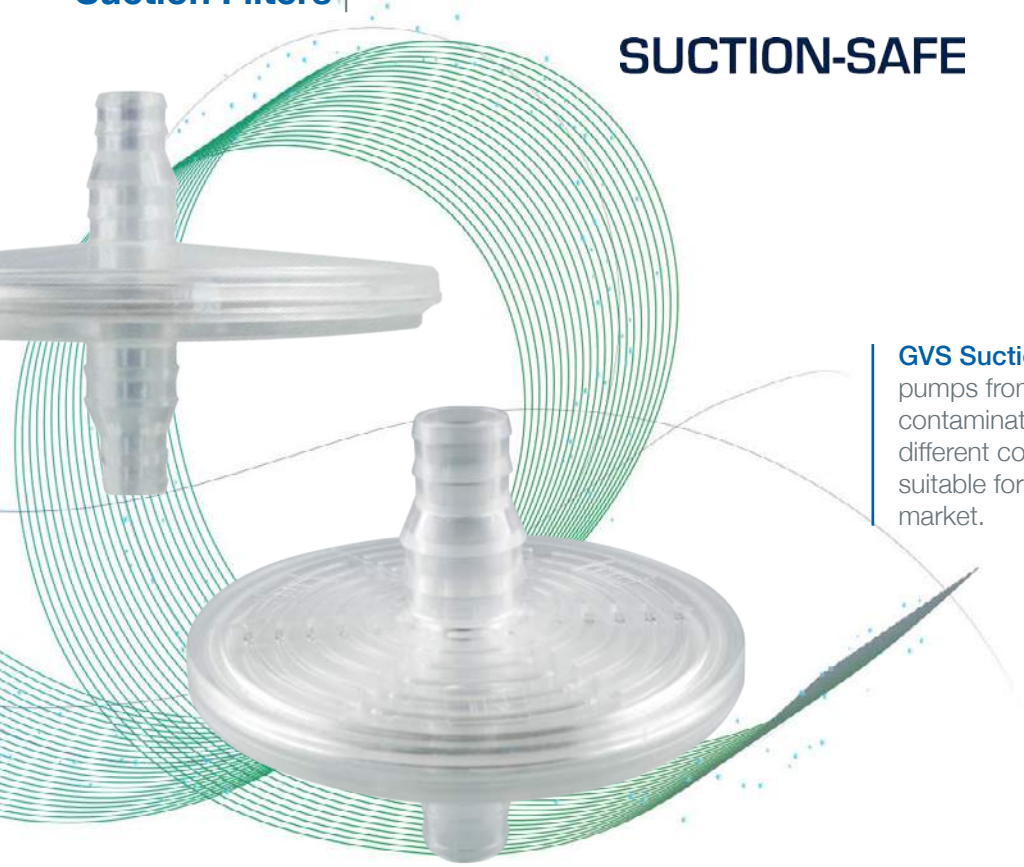
Code	Description	Colour	Box Qty
1898/01BAUB	Nitric oxide scavenger filter Carbon disk + Electrostatic media & CONVERSION MIX Clinic Clean pouch packed	Transparent	10

1898/03

Code	Description	Colour	Box Qty
1898/03BAUB	Nitric oxide scavenger filter Carbon disk + Electrostatic media Clinic Clean pouch packed	Transparent	50

SUCTION-SAFE

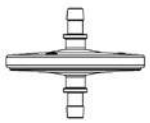
Products Independently tested, data available upon request



GVS Suction filters are used to prevent the suction pumps from being damaged through flooding and contamination. GVS Suction filters are available with different connection sizes and fittings, making them suitable for the most machines and tubing on the market.

Code	Filtration Media	BFE	VFE	Connectors
2000/50	PTFE 1 um	99,9999%	99,9999%	3 mm Hole - 1/8 th NPT Screw Thread 18 mm
2000/51	PTFE 1 um	99,9999%	99,9999%	5.9 - 8 mm
2000/52	PTFE 1 um	99,9999%	99,9999%	1/8 NPT
2000/53	PTFE 1 um	99,9999%	99,9999%	8.4 - 11.5 mm barbed
2000/54	PTFE 1 um	99,9999%	99,9999%	8 mm HB
2200/02	PTFE 1 µm	99.9999%	99.9999%	8 mm HB
2200/06	PTFE 1 µm	99.9999%	99.9999%	5 - 9.5 mm HB
2200/11	PTFE 1 µm	99.9999%	99.9999%	8 mm base/11 mm Lid
2200/16	PTFE 1 µm	99.9999%	99.9999%	11 mm HB
2200/21	PTFE 1 µm	99.9999%	99.9999%	11 mm Base/15 mm Lid
2200/26	PTFE 1 µm	99.9999%	99.9999%	8 mm Base/15 mm Lid
2200/35	PTFE 1 µm	99.9999%	99.9999%	8 mm base/7 mm Lid
2200/55	PTFE 1 µm	99.9999%	99.9999%	9 mm base/12 mm Lid
2200/60	PTFE 1 µm	99.9999%	99.9999%	11 mm Base/18 mm Lid
2200/67	PTFE 1 µm	99.9999%	99.9999%	8 mm HB
2200/70	PTFE 1 µm	99.9999%	99.9999%	8 mm base/12 mm Lid
2200/902	PTFE 1 µm	99.9999%	99.9999%	11-15 mm HB
2200/910	PTFE 1 µm	99.9999%	99.9999%	11-15 mm HB
2200/911	PTFE 1 µm	99.9999%	99.9999%	11-15 mm base/11 mm Lid

2200/02



	Code	Description	Colour	Box Qty
	2200/02ABUA	High Flow Suction Filter bulk packed	Transparent	1000
	2200/02BAUA	High Flow Suction Filter Clinic Clean bag packed	Transparent	300
Suction Kit	2200/02DIKIAUA	High Flow Suction Filter 30 mm Tubing with MLL Sterile	Transparent	250

2200/06

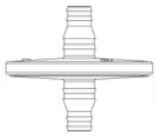
Code	Description	Colour	Box Qty
2200/06ABUB	High Flow Suction Filter bulk packed	Transparent	1000
2200/06BAUB	High Flow Suction Filter Clinic Clean bag packed	Transparent	300

Suction Filters

Products Independently tested, data available upon request

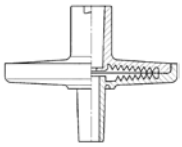
2200/11

Code	Description	Colour	Box Qty
2200/11ABUA	High Flow Suction Filter bulk packed	Transparent	1000
2200/11BAUA	High Flow Suction Filter Clinic Clean bag packed	Transparent	300



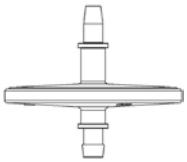
2200/16

Code	Description	Colour	Box Qty
2200/16ABUA	High Flow Suction Filter bulk packed	Transparent	1000
2200/16BAUA	High Flow Suction Filter Clinic Clean bag packed	Transparent	300



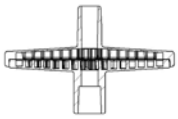
2200/26

Code	Description	Colour	Box Qty
2200/26ABUA	High Flow Suction Filter bulk packed	Transparent	1000
2200/26BAUA	High Flow Suction Filter Clinic Clean bag packed	Transparent	300



2200/35

Code	Description	Colour	Box Qty
2200/35BAUA	High Flow Suction Filter Clinic Clean bag packed	Transparent	300

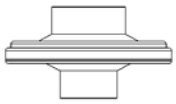


2200/55

Code	Description	Colour	Box Qty
2200/55ABUA	High Flow Suction Filter bulk packed	Transparent	1000
2200/55BAUA	High Flow Suction Filter Clinic Clean bag packed	Transparent	300

2200/60

Code	Description	Colour	Box Qty
2200/60ABUA	High Flow Suction Filter bulk packed	Transparent	1000
2200/60BAUA	High Flow Suction Filter Clinic Clean bag packed	Transparent	300

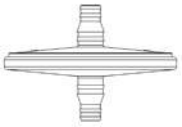


2200/67

Code	Description	Colour	Box Qty
2200/67ABUA	High Flow Suction Filter bulk packed	Transparent	1000
2200/67BAUA	High Flow Suction Filter Clinic Clean bag packed	Transparent	300

2200/70

Code	Description	Colour	Box Qty
2200/70ABUA	High Flow Suction Filter bulk packed	Transparent	1000



2200/902

Code	Description	Colour	Box Qty
2200/902ABUD	High Flow Suction Filter bulk packed	Transparent	500
2200/902BAUD	High Flow Suction Filter Clinic Clean bag packed	Transparent	200

2200/910

Code	Description	Colour	Box Qty
2200/910IAUA	High Flow Suction Filter Clinic Clean bag packed	Transparent	300

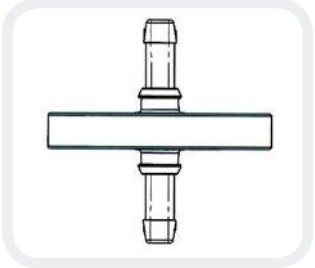
2200/911

Code	Description	Colour	Box Qty
2200/911BAUB	High Flow Suction Filter Clinic Clean bag packed	Transparent	100

Insufflation Filters

Products Independently tested, data available upon request

Code	Filtration Media	BFE	VFE	Connectors
2000/01	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	8 mm HB
2000/02	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	8 mm HB
2000/05	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	8 mm HB
2000/06	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	5.9 - 8 mm HB
2000/07	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	5.9 - 8 mm HB
2000/08	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	5.9 - 8 mm HB
2000/09	Electrostatic 200 gr	99.999%	99.999%	8 mm HB
2000/10	PTFE 1 µm	99.99998%	99.99998%	Stepped Barb - 1/8 NPT Thread
2000/12	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	8 mm HB
2000/17	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	8 mm HB
2000/18	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	8 mm HB
2000/25	PTFE 1 µm	99.99998%	99.99998%	FLL - MSL
2000/42	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	5.0 - 6.5 mm HB
2000/45	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	8.4 - 11.4 mm HB
2000/706	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	5.9 - 8 mm HB
2200/01	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	8 mm HB
2200/05	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	5 - 9.5 mm HB
2200/15	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	11 mm HB
2200/33	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	11 mm base/15 mm Lid
2200/48	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	8 mm Base/15 mm Lid
2200/56	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	6 mm HB
2200/66	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	8 mm Base/11 mm Lid
6421/04	Hydrophobic Glass Micro Fiber Media	99.999993%	99.9995%	22M/15F - 22F/15M



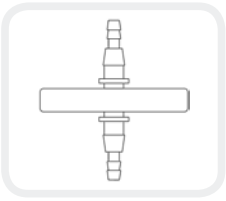
Connector 8 mm HB

Code	Colour
2000/01	Transparent white ring
2000/02	Transparent blue ring
2000/05	Transparent green ring
2000/12	Transparent light blue ring
2000/17	Transparent yellow ring
2000/18	Transparent white ring
2000/20	Transparent white ring

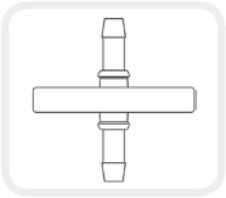
Packaging Version	Description	Box Qty
ABUA	Bulk Packed	1000
BAUA	Clinic Clean Pouch Packed	300

Insufflation Filters

Products Independently tested, data available upon request

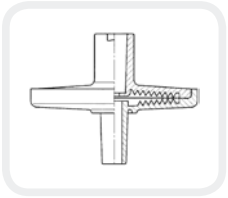


Connector 5.9 - 8 mm HB

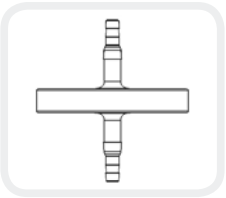


Connector 8 mm HB

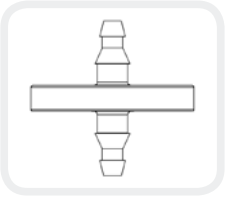
Stepped Barb - 1/8 NPT Thread



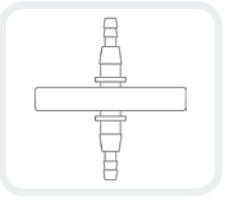
Connector FLL-MSL
Straight Male Connector



Connector 5.0-6.5 mm HB



Connector 8.4-11.4 mm HB



Connector 5.9-8 mm HB

Connector 8 mm HB

Code	Colour
2000/06	Transparent white ring
2000/07	Transparent blue ring
2000/08	Transparent green ring

Packaging Version	Description	Box Qty
ABUA	Bulk Packed	1000
BAUA	Clinic Clean Pouch Packed	300

2000/09

Code	Description	Colour	Box Qty
2000/09ABUA	Gas Vent/Insufflation Filter bulk packed	Transparent Dark blue ring	1000
2000/09BAUA	Gas Vent/Insufflation Filter Clinic Clean pouch packed	Transparent Dark blue ring	300

2000/10

Code	Description	Colour	Box Qty
2000/10ABUA	Gas Vent/Insufflation Filter bulk packed	Transparent White ring	1000

2000/25

Code	Description	Colour	Box Qty
2000/25ABUA	Gas Vent/Insufflation Filter bulk packed	Half Blue - Half Clear	1000

2000/42

Code	Description	Colour	Box Qty
2000/42ABUA	Gas Vent/Insufflation Filter bulk packed	Transparent White ring	1000
2000/42BAUA	Gas Vent/Insufflation Filter Clinic Clean pouch packed	Transparent White ring	300

2000/45

Code	Description	Colour	Box Qty
2000/45ABUA	Gas Vent/Insufflation Filter bulk packed	Transparent Light Blue Ring	1000

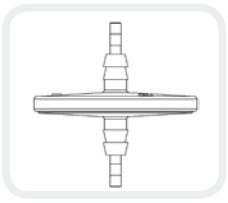
2000/706

Code	Description	Colour	Box Qty
2000/706ABSA	Gas Vent/Insufflation Filter bulk packed	Transparent White Ring	100

2200/01

Code	Description	Colour	Box Qty
2200/01ABUA	Insufflation Filter bulk packed	Transparent	1000
2200/01BAUA	Insufflation Filter Clinic Clean bag packed	Transparent	300

Insufflation Filters

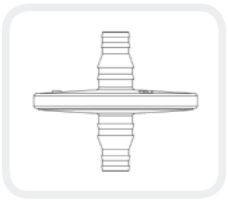


Connector 5 - 9.5 mm HB

2200/05

Products Independently tested, data available upon request

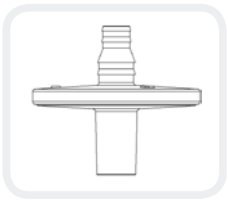
Code	Description	Colour	Box Qty
2200/05ABUB	Insufflation Filter bulk packed	Transparent	1000
2200/05BAUB	Insufflation Filter Clinic Clean bag packed	Transparent	300



Connector 11 mm HB

2200/15

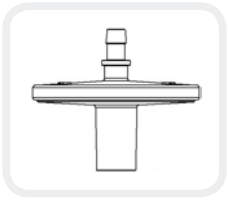
Code	Description	Colour	Box Qty
2200/15ABUA	Insufflation Filter bulk packed	Transparent	1000
2200/15BAUA	Insufflation Filter Clinic Clean bag packed	Transparent	300



Connector 11 mm base / 15 mm Lid

2200/33

Code	Description	Colour	Box Qty
2200/33ABUA	Insufflation Filter bulk packed	Transparent	1000
2200/33BAUA	Insufflation Filter Clinic Clean bag packed	Transparent	300



Connector 8 mm base / 15 mm Lid

2200/48

Code	Description	Colour	Box Qty
2200/48ABUA	Insufflation Filter bulk packed	Transparent	1000
2200/48BAUA	Insufflation Filter Clinic Clean bag packed	Transparent	300

Connector 6 mm HB

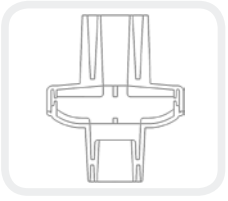
2200/56

Code	Description	Colour	Box Qty
2200/56ABUA	Insufflation Filter bulk packed	Transparent	1000
2200/56BAUA	Insufflation Filter Clinic Clean bag packed	Transparent	300

Connector 8 mm base / 11 mm Lid

2200/66

Code	Description	Colour	Box Qty
2200/66GAUA	Insufflation Filter Clinic Clean bag packed	Transparent	300



Connector 22M/15F - 22F/15M

6421/04

Code	Description	Colour	Box Qty
6421/04ABUA	Insufflation Filter bulk packed	Transparent	1000
6421/04BAUA	Insufflation Filter Clinic Clean bag packed	Transparent	200

Insufflation Filters | Kits

Products Independently tested, data available upon request

2200/01

Code	Description	Box Qty
2200/01DKKBAUA	Insufflation Set, Tubing 1.8m with RMLL-FLL Clinic Clean	40
2200/01BCKBTUA	Insufflation Set, Tubing 3.1m with RMLL-Soft Connector, Clinic Clean	40
2200/01BVCKBAUA	Insufflation Set, Tubing 3.1m with RMLL-Soft Connector, Clinic Clean	40

2200/05

Code	Description	Box Qty
2200/05BRKBAUB	Insufflation Set, Tubing 8mm x 11mm, 100 and 200 mm length, Clinic Clean	200

2200/25

Code	Description	Box Qty
2200/25BUKBAUA	Insufflation Set, Tubing 3m with Soft Connector, Clinic Clean	50

2200/62

Code	Description	Box Qty
2200/62BHKBTUA	Insufflation Set, 8mm HB Tubing 5.7m with RMLL, Pouch Sterile	50

2000/05

Code	Description	Box Qty
2000/05BAKBTUA	Insufflation Set, 8mm HB Tubing 3.1m with RMLL, Pouch Sterile	40
2000/05BAKBAUA	Insufflation Set, 8mm HB Tubing 3.1m with RMLL, Clinic Clean	40

2000/18

Code	Description	Box Qty
2000/18BEKBAUA	Insufflation Set, 8mm HB Tubing 95mm Silicone, PP-White Ring, Clinic Clean	300

2200/48

Code	Description	Box Qty
2200/48BIKBTUA	Insufflation Set, Tubing 3m with RMLL, Pouch Sterile	40
2200/48BIKBAUA	Insufflation Set, Tubing 3m with RMLL, Clinic Clean	40

6421/04

Code	Description	Box Qty
6421/04BPKATUA	Insufflation kit with 3M tube with RMLL Pouch Sterile	60
6421/04BGKBTUA	Hi Flow Insufflation Kit 2,5m tube with RMLL Pouch Sterile	40
6421/04BGKBAUA	Hi Flow Insufflation 2,5m tube with RMLL Clinic Clean	40

Smoke Evacuation Filter

Products Independently tested, data available upon request

LAPARO-CLEAR

GVS Smoke Evaquation Filters

GVS offers a number of smoke evacuation filters to minimize the health hazards associated with surgical laser plume. Our products use the most advanced filtration technology to provide the most cost effective and efficient removal of hazardous surgical smoke plumes GVS smoke evacuation filters fit directly into the major suction units on the market for safe capture of pathogens and other toxic components of surgical plume.

Code	2200/47	2200/947
Version	Smoke Evacuation Filter	Smoke Evacuation Filter
Housing Material	Translucent Styrene-Butadiene	Clear Styrene-Butadiene Copolymer
Filter Media	Glass microfibre with impregnated carbon lyer	Hydrophobic PTFE 1.0 µm
Filtration Efficiency BFE	99.999982%	99.99998%
Filtration Efficiency VFE	99.999995%	99.99998%
Connectors	8 mm Hose Barbed, Tubing 4 m with RMLL+Clamp	11-15 mm HB
Max Operating Temp	60° C	60° C
Max Operating Pressure	20 psi	60 psi
Sterile Applications	Laparoscopic surgery	Laparoscopic surgery

2200/47

Code	Description	Colour	Box Qty
2200/47ABUA	Smoke Evacuation Filter 8mm - 8mm Base bulk packed bag packed	Transparent	1000

2200/47 Kit

Code	Description	Colour	Box Qty
2200/47BBKBAUA	Laparo Clear Smoke Filtration Kit with roller clamp, Tubing 4m with RMLL Clinic Clean pouch packed	Transparent	40
2200/47BBKBTUA	Laparo Clear Smoke Filtration Kit with roller clamp, Tubing 4m with RMLL Sterile pouch packed	Transparent	800
2200/47BDKBAUA	Laparo Clear Smoke Filtration Kit without roller clamp, Tubing 4m with RMLL Clinic Clean pouch packed	Transparent	40
2200/47BDKBTUA	Laparo Clear Smoke Filtration Kit without roller clamp, Tubing 4m with RMLL Sterile pouch packed	Transparent	800

2200/947

Code	Description	Colour	Box Qty
2200/947BAUB	Smoke Evacuation Filter 11m - 15m HB Clinic Clean pouch packed	Transparent	200

VENT-SAFE

• GAS-AIR VENT FILTER •

Gas-Air vent filters

GVS Gas-Air vent filters protect the interior environment and the atmosphere from contaminants. This filter family is essential for the protection of devices/electronics from aerosols or liquid intrusion.

High-efficiency removal

Code	Filtration Media	BFE	VFE	Filtration Efficiency @ 30L/min	Resistance to Air Flow Rate @ 30L/min	Connectors
2000/01	Hydrophobic Glass Microfibre Media	99.999993%	99.9995%	99.978%	33.1 mBar	8 mm HB
2000/02	Hydrophobic Glass Microfibre Media	99.999993%	99.9995%	99.997%	33.1 mBar	8 mm HB
2000/05	Hydrophobic Glass Microfibre Media	99.999993%	99.9995%	99.997%	33.1 mBar	8 mm HB
2000/06	Hydrophobic Glass Microfibre Media	99.999993%	99.9995%	99.997%	33.1 mBar	5.9-8 mm HB
2000/07	Hydrophobic Glass Microfibre Media	99.999993%	99.9995%	99.997%	33.1 mBar	5.9-8 mm HB
2000/08	Hydrophobic Glass Microfibre Media	99.999993%	99.9995%	99.997%	33.1 mBar	5.9-8 mm HB
2000/09	Hydrophobic Glass Microfibre Media	99.999993%	99.9995%	99.997%	33.1 mBar	8 mm HB

Connector
8 mm HB

Code	Colour
2000/01	Transparent white ring
2000/02	Transparent blue ring
2000/05	Transparent green ring
2000/09	Transparent dark blue ring

Packaging Version	Description	Box Qty
ABUA	Bulk Packed	1000
BAUA	Clinic Clean Pouch Packed	300

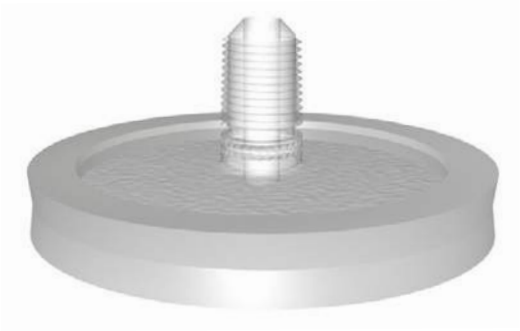
Connector
5.9-8 mm HB

Code	Colour
2000/06	Transparent white ring
2000/07	Transparent blue ring
2000/08	Transparent green ring

Packaging Version	Description	Box Qty
ABUA	Bulk Packed	1000
BAUA	Clinic Clean Pouch Packed	300

Autoclave Filter

Products Independently tested, data available upon request



Code	2000/35	2000/37	2000/38	2000/39
Housing Material	Polypropylene	Polypropylene	Polypropylene	Polypropylene
Filter Media	Hydrophobic Glass Micro Fiber Media	Hydrophobic Glass Micro Fiber Media	Hydrophobic Glass Micro Fiber Media	Hydrophobic Glass Micro Fiber Media
Filtration Efficiency BFE	99.999%	99.999%	99.999%	99.999%
Filtration Efficiency VFE	99.9999%	99.999%	99.9999%	99.9999%
Filtration Ability	0.027 µm	0.027 µm	0.027 µm	0.027 µm
Effective Filtration Area	14.6 cm^2	14.6 cm^2	14.6 cm^2	14.6 cm^2
Connectors	1/8 NPT Thread Connector	1/8 BSP Thread Connector	1/8 NPT Thread Connector + 8 mm Barb	1/8 NPT Thread Connector
Filter length	33.5 mm	29.6 mm	56 mm	25.5 mm

CONNECTORS LEGEND

NPT - National Standard Pipe Thread		BSP - British Standard Pipe	
Pipe Size (inch)	Thread Pitch (mm)	Pipe Size (inch)	Thread Pitch (mm)
1/8	0.9407	1/8	0.907

2000/35

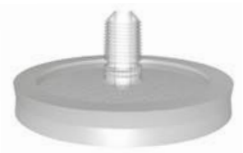
Code	Description	Colour	Box Qty
2000/35ABUA	Gas/Air Vent Filter bulk packed	White	1000
2000/35BAUA	Gas/Air Vent Filter Clinic clean pouch packed	White	300

2000/37

Code	Description	Colour	Box Qty
2000/37ABUA	Gas/Air Vent Filter bulk packed	White	1000
2000/37BAUA	Gas/Air Vent Filter Clinic clean pouch packed	White	300

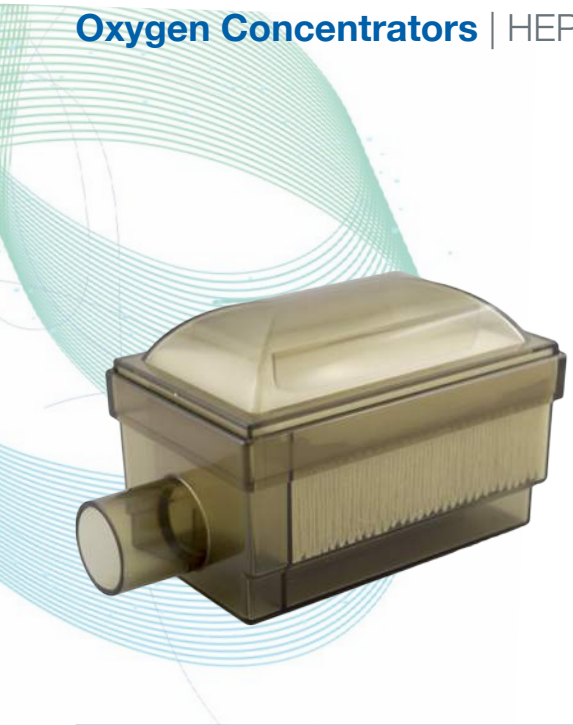
2000/38

Code	Description	Colour	Box Qty
2000/38ABUA	Gas/Air Vent Filter bulk packed	White	1000
2000/38BAUA	Gas/Air Vent Filter Clinic clean pouch packed	White	300



2000/39

Code	Description	Colour	Box Qty
2000/39ABUA	Gas/Air Vent Filter bulk packed	White	1000
2000/39BAUA	Gas/Air Vent Filter Clinic clean pouch packed	White	300



OXY-SAFE
• OXYGEN CONCENTRATOR VENT FILTER •

GVS Oxygen Concentrator filters and pre filters protect the Oxygen Concentrator device and the patient from particulate matter and the risk of infection. They also work as a noise dampener to reduce the level of sound emitted by the machine. GVS Oxygen Concentrator Filters cover the major manufacturers including Respironics, De Vilbiss, Invacare, Airsep, Nidek and SeQual.

Code	3200/03	3200/08	4100/20	4100/30
Version	HEPA	HEPA	HEPA	HEPA
Housing Material	ABS	ABS	ABS	ABS
Filter Media	Glass microfibre	Glass microfibre	Glass microfibre	Glass microfibre
Filtration Efficiency BFE	99.9999%	99.9999%	99.9999%	99.9999%
Filtration Efficiency VFE	99.9999%	99.9999%	99.9999%	99.9999%
Filtration Ability	0.027 µm	0.027 µm	0.027 µm	0.027 µm
Capacity	Volumes up to 100 L/min	Volumes up to 100 L/min	Volumes up to 100 L/min	Volumes up to 100 L/min
Resistance	Low level due to full media utilization	Low level due to full media utilization	Low level due to full media utilization	Low level due to full media utilization
Noise Level	Acoustic media reduces noise	Acoustic media reduces noise	Acoustic media reduces noise	Acoustic media reduces noise

3200/03

Code	Description	Box Qty
3200/03LAUA	Oxygen Concentrator HEPA Filter (long life) Clinic Clean bag packed	100

3200/08

Code	Description	Box Qty
3200/08BAUC	Oxygen Concentrator HEPA Filter (long life) Clinic Clean bag packed	125

4100/20

Code	Description	Box Qty
4100/20BAUC	Oxygen Concentrator HEPA Filter Clinic Clean bag packed	125

4100/30

Code	Description	Box Qty
4100/30BAUA	Oxygen Concentrator HEPA Filter Clinic Clean bag packed	125

Oxygen Concentrators | HEPA Filters, foam pre-filters and accessories

Code	4100/92	4100/725	4100/735
Version	HEPA	HEPA	HEPA
Housing Material	ABS	ABS	ABS
Filter Media	Glass microfibre	Glass microfibre	Glass microfibre
Filtration Efficiency BFE	99.9999%	99.9999%	99.9999%
Filtration Efficiency VFE	99.9999%	99.9999%	99.9999%
Filtration Ability	0.027 µm	0.027 µm	0.027 µm
Capacity	Volumes up to 100 L/min	Volumes up to 100 L/min	Volumes up to 100 L/min
Resistance	Low level due to full media utilization	Low level due to full media utilization	Low level due to full media utilization
Noise Level	Acoustic media reduces noise	Acoustic media reduces noise	Acoustic media reduces noise
Connections	Push fit 22 mm	Push fit 22 mm	Push fit 22 mm

4100/92

Code	Description	Box Qty
4100/92BAUA	Oxygen Concentrator HEPA Filter clinic clean bag packed	125

4100/725

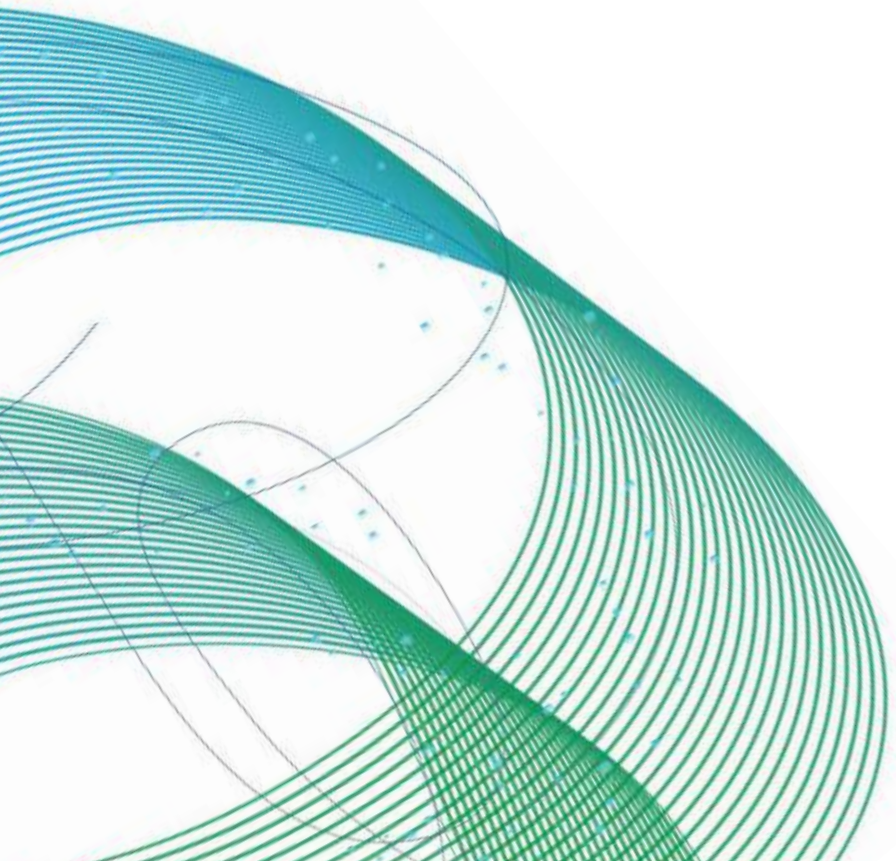
Code	Description	Box Qty
4100/725BAUB	Oxygen Concentrator HEPA Filter clinic clean bag packed	100

4100/735

Code	Description	Box Qty
4100/735BAUB	Oxygen Concentrator HEPA Filter clinic clean bag packed	100

Oxygen Concentrator Replacement Filters

Product Code	Machine Using	Description	Size
Pre-filters			
7270/127	New Life, QuietLife 5, Oxiboy 6005	Foam pollen filter	132L x 99Wmm, 18mm depth
7270/061	New Life	Felt Filter	50mm Ø o/d 17mm Ø i/d 25mm depth
7270/121	Compact 5	Foam pollen filter	142L x 93Wmm, 15mm depth
7270/145	505DS, 505DZ, 505CS, 515DS, 515KS, Solairis	Foam pollen filter	145L x 92Wmm, 15mm depth
7270/430	Platinum5, Platinum10	Foam pollen filter	227 x 65Wmm, 12mm depth
7270/109	PerfectO2	Foam pollen filter	170L x 85Wmm, 12mm depth
7270/434	NUVO / MARK 4,5 & 5 Plus	Foam pollen filter	249 x 104Wmm, 8mm depth
7270/435	Nuvo Lite	Foam pollen filter	302 x 104Wmm, 9mm depth
6888/01	Millenium	Pre-Filter	204L x 100Wmm, 8mm depth
Vent filters & Air Intake filters			
2000/01	All models	Air Vent Filter	46.50mm diameter
2000/06	All models	Final Bacteriological Filter	59 H x 53.5Wmm
1420/01	Quantum	Air Intake Filter	N/A



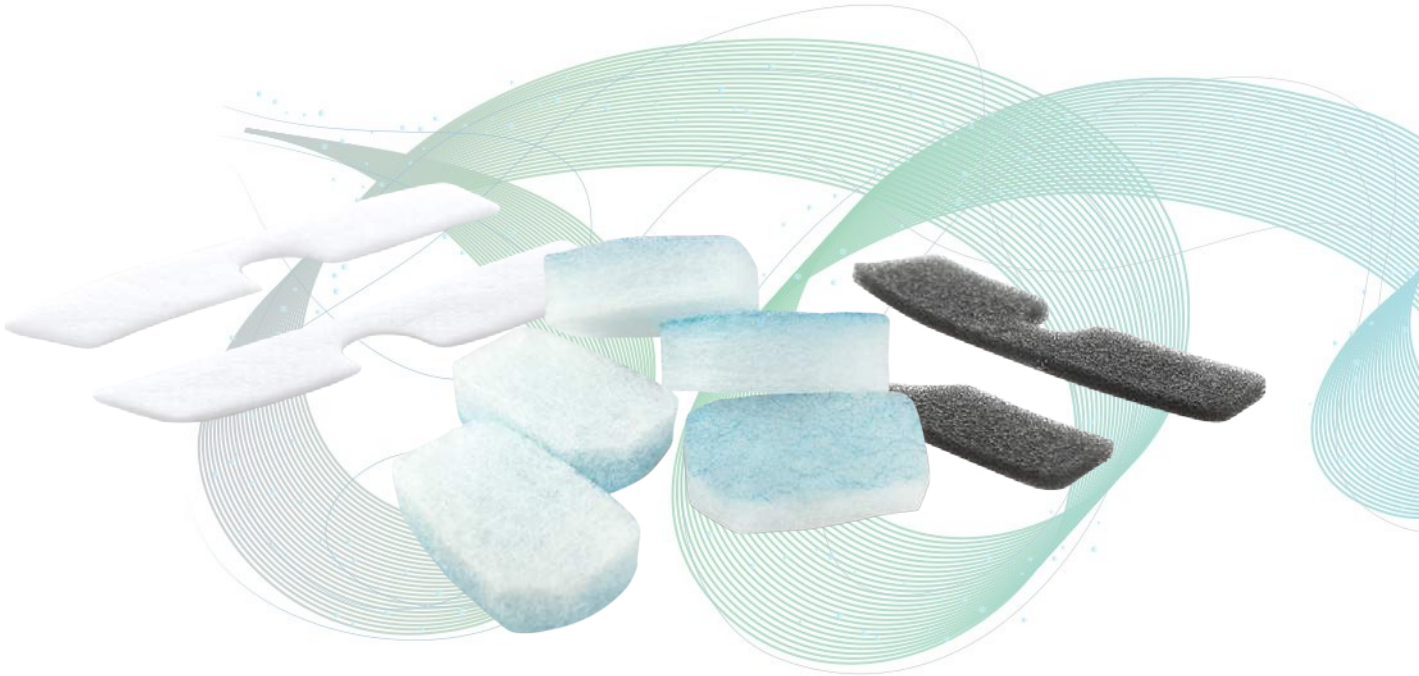
CPAP/BIPAP | Filter Range

FILTER TECHNOLOGY

GVS advanced technological skills combined with a multi-faceted team which works closely with clients, ensure the success of well projects.
The result is a range of more than 100 different fine, ultrafine & pollen filters to fit all leading CPAP/BIPAP machines.
GVS Manufacturing Capabilities: Die Cut, Cut & Weld, Cut & Seal, Overmould

GVS CPAP / BPAP FILTERS

The CPAP machine takes in air, filters and pressurizes it to deliver therapy to help prevent the airway from collapsing during sleep. These devices can also attract dust and potential allergens. The filter is designed to clear these elements from the air before it reaches the patient's lungs.



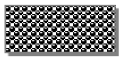
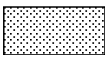
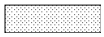
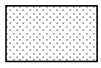
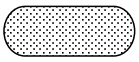
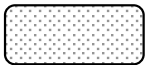
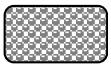
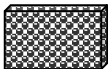
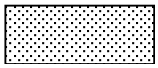
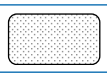
Fine
Bacterial/Viral Electrostatic Media

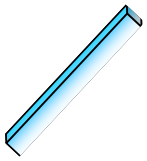
Ultrafine
Bacterial/Viral Electrostatic Media

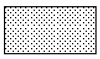
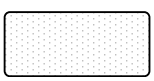
Pollen
Foam Media/Polyester felt Media

For more information please contact us using application form (www.gvs.com) stating the brand and model of CPAP / BIPAP machine

CPAP-BIPAP • REPLACEMENT FILTERS

Product	GVS product code	Machine Using	Description	Size	Manufacturer Ref. No
Airox					
	7270/371	Legendair	Foam+Bacterial Filter	70mm x 60mm 10mm depth	Legendair
Breas					
	7270/331	VIVO series 30/40	Foam Pollen Filter	Approx 85x15.5mm with Tunnel 10mm depth	003563
	7270/332	VIVO series 30/40	Electrostatic filtration media	Approx 85x15.5mm with Tunnel	003564
	7270/497	VIVO series 50/60	Foam Pollen Filter	56 x 56mm x 5mm depth	VIVO series 50/60
	7270/496	VIVO series 50/60	Electrostatic filtration media	56 x 56mm	VIVO series 50/60
	7270/407	iSleep Series	Foam Pollen Filter	66mm x 23mm 5mm depth	004154
	7270/399	iSleep Series	Electrostatic filtration media	66mm x 23mm	004153
	7270/158	PV10	Electrostatic filtration media	67L x 23Wmm	001975
	7270/162	PV100	Electrostatic filtration media	65L x 32Wmm	PV100
	7270/159	PV101/102	Electrostatic filtration media	105L x 22Wmm	PV101/102
	7270/496	VIVO 50/60	Electrostatic filtration media	56 x 56mm	VIVO 50/60
	7270/497	VIVO 50/60	Foam Pollen Filter	56 x 56mm x 5mm depth	VIVO 50/60
	7270/054	PV201/501	Electrostatic filtration media	82 x 82mm	PV201/501
	7270/133	PV401	Electrostatic filtration media	145Lx 40Wmm rounded ends	269026
	7270/106	PV403	Electrostatic filtration media	Breas J Shape	TCF-1-403
	7270/163	PV501	Electrostatic filtration media	82L x 82Wmm	PV501
DeVilbiss					
	7270/508	Sleep cube	Electrostatic filtration media	45L x 32Wmm Radius corners	DV51D-603
	7270/509	Sleep cube	Foam Pollen Filter	45L x 32Wmm Radius corners 6mm depth	DV51D-602
	7270/030	Horizon LT, Auto	Foam Pollen Filter	100Lx 30Wmm 6mm depth	"8000D-602
	7270/374	Horizon LT, Auto	Electrostatic filtration media	107 x 33mm	"8000D-603 "
	7270/453	Sleep Cube	Electrostatic filtration media	45 x 32mm Radius corners	HCFD02-0
Fisher&Paykel					
	7270/375	Sleepstyle 600	Electrostatic filtration media	70 x 24mm	900HC240
	7270/150	Sleepstyle HC200, Sleepstyle 221 / 230	Electrostatic filtration media	129L x 18.3Wmm with cut outs	900HC222
	7270/499	ICON	Synthetic felt	54mm x 20mm 13.83mm depth	9001CON503

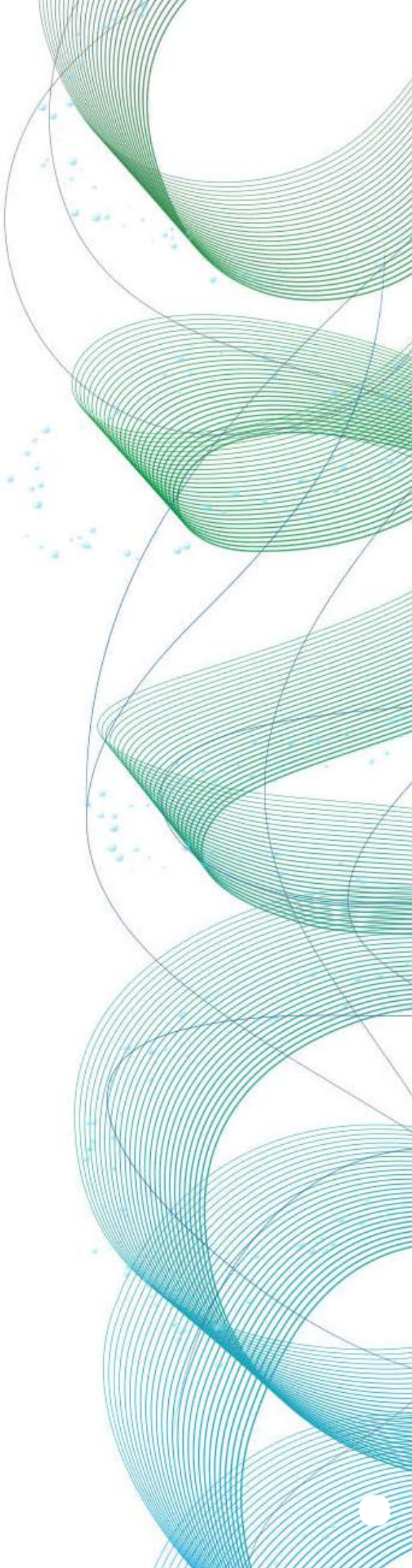
CPAP-BIPAP • REPLACEMENT FILTERS					
Product	Machine Using	Description	Size	Manufacturer Ref. No	GVS product code
Healthdyne					
	TRANQUILITY QUEST/ BETA/ DELTA	Foam Pollen Filter	116 x 115 x 111mm three curved sides 6mm depth	7301	7270/18
	TRANQUILITY QUEST/ BETA/ DELTA / CALYPSO	Electrostatic filtration media	115 x 113 x 111mm three curved sides	7302	7270/267
Puritan Bennett - Covidien					
	Legendair, PB 560, PB 520	Foam+Bacterial Filter	70mm x 60mm 10mm depth	Legendair, PB 560, PB 520	7270/371
	Sandman	Foam Pollen Filter	42 x27mm 15mm depth	M-414840-06	7270/450
	Sandman	Electrostatic filtration media	42 x 27mm Radius corners	M-414841-07	7270/530
	Goodknight 420 / 425	Foam Pollen Filter	48Lx 23Wmm 6mm depth	M-413950-04	7270/188
	Goodknight 420 / 425	Electrostatic filtration media	45L x 20Wmm Radius corners	M-413950-04	7270/535
	GOODNIGHT 418	Foam Pollen Filter	132L x 21Wmm 8mm depth	M-413560-01	7270/045
	GOODNIGHT 418	Electrostatic filtration media	130L x 20Wmm	M-413560-02	7270/502
	NPB REM+Ecco,-Soft,Auto, Duo	Foam Pollen Filter	66L x 26Wmm 26mm depth	M-400413-01	7270/118
	Knightstar 335	Foam Pollen Filter	160L x 110Wmm 10mm depth	Knightstar 335	7270/149
Resmed					
	RESMED S5 / VPAP II / BILEVEL./ VPAP III BILEVEL / SULLIVAN AUTOSET T / AUTOSET SPIRIT /CS2 AUTOSET HUMIDAIR AND S8 AUTOSET H3I	Foam Pollen Filter	167L x 17Wmm 10mm depth	14907/8	7270/12
	RESMED S5 / VPAP II / BILEVEL./ VPAP III BILEVEL / SULLIVAN AUTOSET T / AUTOSET SPIRIT /CS2 AUTOSET HUMIDAIR AND S8 AUTOSET H3I	Synthetic felt	167 L x 17Wmm	14907/8	7270/13
	S6 Resmed/Sullivan	Bacterial Filter	145L x 20Wmm top of curve	21935/21936/21941/21944	7270/44
	Autocap/Autoset	Bacterial Filter	Trapezoidal shape 40mm depth/30mm tapering to 25mm R/ corners		7270/139
	S7 /Autopop / Autoset	Synthetic felt	Trapezoidal shape 40mm depth 30mm tapering to 25mm	S7 R309-758	7270/410
	S8	Bacterial Filter - Hypoallergenic series	34.50L x 36.50Wmm tapered to top	S8	7270/343

Product	Machine Using	Description	Size	Manufacturer Ref. No	GVS product code
	S8	Synthetic felt	34.50L x 36.50Wmm tapered to top	R330-733	7270/340
	AUTOSET ACS2	Bacterial Filter - Hypoallergenic series	Overall 48mm x 27.9mm	AUTOSET ACS2	7270/442
	S9	Synthetic felt	53.6 x 35.6mm	36850/ 36851/ 36852/ 36853	7270/471
	S9	Bacterial Filter - Hypoallergenic series	53.6 x 35.6mm	36855/ 36856/ 36857/ 36858	7270/503
Respironics					
	BIPAP PRO/DUET LX / HARMONY S/T	Foam Pollen Filter	120L x 60Wmm 10mm depth	622220	7270/32
	BIPAP PRO/DUET LX / HARMONY S/T	Electrostatic filtration media	122L x 82Wmm	622219	7270/33
	SOLO/SOLO LX/ ARIA/ VIRTUOSO	Electrostatic filtration media	86L x 71Wmm 19 x 10mm tab	622017	7270/43
	SOLO/SOLO LX/ ARIA/ VIRTUOSO	Foam Pollen Filter	85L x 60Wmm 10mm depth	622018	7270/24
	PLV100/101	Electrostatic filtration media	80mmØ	35220	7270/132
	M SERIES / PR System one / REMstar	Foam Pollen Filter	44L x 23Wmm 10mm depth	"139608 1029330 "	7270/351
	M SERIES / PR System one / REMstar	Electrostatic filtration media	45L x 23Wmm plus Tab	139609 1029331	7270/355
	PR System one / REMstar	Electrostatic filtration media	43.9 x 21.8mm	1063096	7270/504
	REMSTAR	Foam Pollen Filter	156L x 130Wmm 12mm depth	362521	7270/02
	REMSTAR	Electrostatic filtration media	141L x 119Wmm Ellipse	362522	7270/01
	ARIA/DUET/ VIRTUOSO/QUARTET	Electrostatic filtration media	94L x 64Wmm one corner cut out	532311	7270/23
	REMPRO / HARMONY 2	Foam Pollen Filter	94L x 40Wmm 9mm depth	1005964	7270/50
	REMPRO / HARMONY 3	Electrostatic filtration media	91L x 40Wmm 16 x 10mm with tab	1005965	7270/135
	BIPAP S AND ST AND STD / SLEEP EASY	Electrostatic filtration media	200L x 125Wmm	302064	7270/05
	BIPAP VISION	Electrostatic filtration media	190Lmm x 77Wmm	582101	7270/136
Weinmann					
	SOMNOTRON / SOMNOSMART	Foam Pollen Filter	160L x 27Wmm 10mm depth	23520	7270/19
	SOMNOTRON / SOMNOSMART	Electrostatic filtration media	148L x 78Wmm	23540	7270/105
	SOMNOCONFORT / SOMNOSMART 2	Foam Pollen Filter	68L x 68Wmm 8mm depth	SOMNOCONFORT / SOMNOSMART 2	7270/102
	SOMNOCONFORT / SOMNOSMART 2	Electrostatic filtration media	67.5L x 67.5Wmm	SOMNOCONFORT / SOMNOSMART 2	7270/101
	SOMNOCONFORT 2/ SOMNOBALANCE	Foam Pollen Filter	70L x 30Wmm 8mm depth	SOMNOCONFORT 2/ SOMNOBALANCE	7270/445
	SOMNOCONFORT 2/ SOMNOBALANCE	Electrostatic filtration media	68.5L x 29.5Wmm	SOMNOCONFORT 2/ SOMNOBALANCE	7270/379

Medical Air Filtration | Code Index

Index

8866/100ABSA	24
8866/100BAUA	24
8866/100BRSA	24
8866/100BSSA	24
9064/100BAUA	19
9064/711ABSA	17
9064/711BAUA	17
9064/711BRSA	17
9064/711BSSA	17
9064/751ABSA	21
9064/751BRSA	21
9064/751BSSA	21
9065/710ABSA	17
9065/710BAUA	17
9065/710BRSA	17
9065/710BSSA	17
9065/750ABSA	21
9065/750BRSA	21
9065/750BSSA	21
9066/701ABSA	14
9066/701BAUA	14
9066/701BRSA	14
9066/701BSSA	14
9066/711ABSA	19
9066/711BAUA	19
9066/711BRSA	19
9066/711BSSA	19
9066/751ABSA	22
9066/751BAUA	22
9066/751BRSA	22
9066/751BSSA	22
9066/771ABSA	22
9066/771BAUA	22
9066/771BRSA	22
9066/771BSSA	22
9067/700ABSA	14
9067/700BRSA	14
9067/700BSSA	14
9067/710ABSA	19
9067/710BAUA	19
9067/710BRSA	19
9067/710BSSA	19
9067/750ABSA	22
9067/750BAUA	22
9067/750BRSA	22
9067/750BSSA	22
9080/01ABUA	14
9080/01BAUA	14
9080/01BTUA	14
9080/100ABUA	19
9080/100BAUA	19
9080/100BTUA	19
9080/700ABSA	14
9080/700BAUA	14
9080/700BRSA	14
9080/700BSSA	14
9080/710ABSA	19
9080/710BAUA	19
9080/710BRSA	19
9080/710BSSA	19
9080/750ABSA	23
9080/750BAUA	23
9080/750BRSA	23
9080/750BSSA	23
9085/01BAUA	23
9085/751ABSA	23
9085/751BRSA	23
9085/751BSSA	23
9085/771ABSA	23
9085/771BRSA	23
9085/771BSSA	23
9500/01ABSB	25
9500/01BAUB	25
9500/01BRSB	25
9500/01BSSB	25
9500/710ABSA	25
9500/710BAUA	25
9500/710BRSA	25
9500/710BSSA	25
9500/750ABSA	25
9500/750BAUA	25
9500/750BRSA	25
9500/750BSSA	25
A508BAUA	32
A508BPUA	32
A539ABUA	32
A539BAUB	32
A571ABUA	32
A571BAUA	32
FR003AKRET200A00	21
FR003AKRET200D00	21
FR003SKRET200A00	21
FR003SKRET200D00	21
FR004AKRET200A00	13
FR004AKRET200D00	13
FR004SKRET200A00	13
FR004SKRET200D00	13

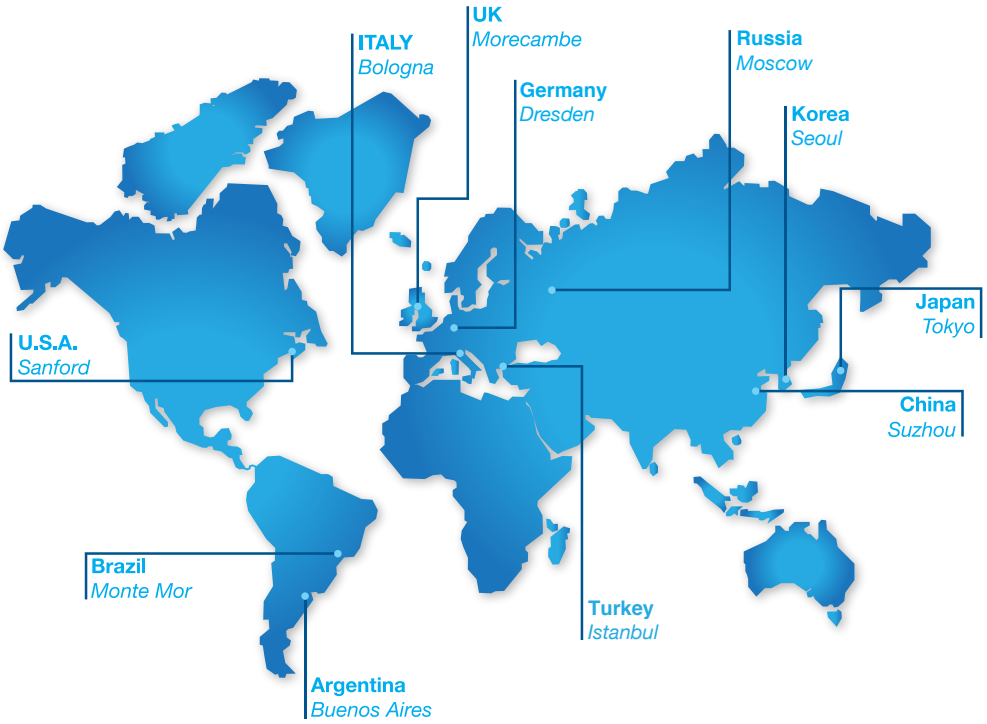


GVS

FILTER TECHNOLOGY


Because we care.

FILTER TECHNOLOGY



WORLDWIDE

EUROPE

Italy Office
Headquarters
GVS S.p.A.
Via Roma 50
40069 Zola Predosa (BO) - Italy
tel. +39 051 6176311
fax +39 051 6176200
gvs@gvs.com

Germany - Central Europe
Grunaer Weg 4a
D 01277 Dresden (Germany)
tel. +49 (0) 171-7964343
gvsgermany@gvs.com

Russia
GVS Russia LLC.
Profsoyuznaya Street, 25-A, office 102
117418, Moscow
Russian Federation (Russia)
tel. +7 495 0045077
gvsrussia@gvs.com

United Kingdom
GVS Filter Technology UK
Vickers Industrial Estate
Mellishaw Lane, Morecambe
Lancashire LA3 3EN
tel. +44 (0) 1524 847600
gvsuk@gvs.com

Turkey
GVS Türkiye
Nidakule Merdivenköy Mahallesi
Bora Sokak No:1 Kat:7 - 34732 Istanbul
tel. +90 216 468 88 24
gvsturkey@gvs.com

ASIA

China
GVS Technology (Suzhou) Co., Ltd.
Fengqiao Civil-Run Sci-Tech Park,
602 Changjiang Road,S.N.D.
Suzhou, China 215129
tel. +86 512 6661 9880
fax: +86 512 6661 9882
gvschina@gvs.com

GVS YIBO Medical Devices Co. Ltd.
17, Zhongshan East - Yuyao city,
315403 Zhejiang Province, China
tel. +86 574 6257 5697
fax +86 574 6257 5699

Japan
GVS Japan K.K.
KKD Building 4F, 7-10-12 Nishishinjuku
Shinjuku-ku, Tokyo 160-0023 Japan
tel. +81 3 5937 1447
fax +81 3 5937 1448
gvsjapan@gvs.com

Korea
GVS Korea Ltd
#315 Bricks Tower
368 Gyungchun-ro(Gaun-dong),
Namyangju-si, Gyunggi-do,
tel: +82 31 563 9873
fax: +82 31 563 9874
gvskorea@gvs.com

India
India Office
V30, 14th Street, Anna Nagar,
Chennai - 600040 India
tel. +91 98840 58375
gvsindia@gvs.com

AMERICA

U.S.A.
GVS North America
63 Community Drive
Sanford, ME 04073 - USA
tel. +1 866 7361250
gvsusa@gvs.com

GVS Filtration Inc.
2150 Industrial Drive
Findlay, OH. 45840 - USA
Tel. +1.419.423.9040
gvsfiltration@gvs.com

2200 W 20th Avenue
Bloomer, WI 54724 - USA
Tel. +1.715.568.5944
gvsfiltration@gvs.com

Argentina
GVS Argentina S.A.
Francisco Acuña de Figueroa 719 Piso:11 Of: 57
1416 Buenos Aires - Argentina
tel. +54 11 48614750
gvsarg@gvs.com

Brazil
GVS do Brasil Ltda.
Rodovia Conego Cyriaco Scaranello Pires 251
Jd. Progresso, CEP 13190-000
Monte Mor (SP) - Brasil
tel. +55 19 38797200
fax +55 19 38797251
gvs@gvs.com.br

PRODUCT COLLECTION - Healthcare Air Filtration

Printing History: Version 11102017